```
Query Match 100.0%; Score 2812; DB 11; Length 557; Best Local Similarity 100.0%; Pred. No. 1.1e-157; Matches 557; Conservative 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q99vv89 mus musculu Q8cf1 mus musculu Q8cf1 mus musculu Q8cf1 mus musculu Q9nu91 homo sapien Q9nu90 homo sapien Q9nu90 homo sapien Q9seve homo sapien Q9uc79 strongyloce Q8teve homo sapien Q9uc79 homo sapien Q9uc79 homo sapien Q9uc79 homo sapien Q9uc79 homo sapien Q9icx7 homo sapien Q9icx7 homo sapien Q8iuc7 homo sapien
                                                                         October 9, 2003, 10:57:41; Search time 37.6351 Seconds (without alignments) 3819.179 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                   US-09-647-978A-2
2832
1 MSDGTASARSSSPLDRDPAF......LSCAEESEEDCPRELTDPKS 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Description
                                                                                                                                                                                                                                                                830525
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                             Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                  830525 segs, 258052604 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                     OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                SPTREMBL_23:*

1: Sp_archea:*
2: Sp_bacteria:*
3: Sp_fungi:*
4: Sp_invertebrate:*
: Sp_mammal:*
: Sp_mammal:*
: Sp_mammal:*
: Sp_phage:*
: Sp_phage:*
: Sp_phage:*
: Sp_phage:*
: Sp_phage:*
: Sp_phage:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q9WV89
Q8CFL1
Q81VZ5
Q9NU93
Q28006
Q28006
Q9NU91
Q9NU91
Q9NU91
Q9NSN7
Q9NU90
Q9U679
Q9U679
Q9U679
Q9TEW8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sp_rodent.*
sp_virus.*
sp_virus.*
sp_varebrate.*
sp_rvirus.*
sp_rvirus.*
sp_pacteriap.*
                                                                                                                                                                                         BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sp_archeap:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          %
Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2832
2522
7552
195.5
192.5
187.5
183.5
182.5
181.5
177.5
                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                      Database :
                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                  Searched:
                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Result
No.
```

Q8iuc9 homo sapien 99h312 schizosacch 99w3v2 drosophila 046112 drosophila 054512 mus musculu 056464 caenorhabdi Q5664 caenorhabdi Q566402 mus musculu Q9v6p9 drosophila P87198 ustilago ma Q8nen7 homo sapien Q96hns homo sapien Q96hns homo sapien Q96hns homo sapien Q96hs homo sapien Q9h430 drosophila Q9his musculu Q9vye6 caenorhabdi Q9vye6 caenorhabdi Q9vye6 musculu	date) update) ebrata; Euteleostomi; Muridae; Murinae; Mus.  A. 199 Coker K.J., Ceresa B.P., -binding protein mediating
QBIUC9 QQBIUC9 QQHGLZ QQH3V2 QA6412 Q64512 Q6504 Q05066 P91146 P91149 QQBNBNT	S57 AA.  557 AA.  cta; Vert gnathi; Port J.S. sin J.B. ntaxin 4  OMAIN.
11104 4 1116 3 1116 3 1116 3 1116 3 1116 3 1116 3 1116 3 1116 1 1116 3 1116 3 116 3	PRELIMINARY;  (TrEMEBLEI 12, Crea (TrEMEBLEI 12, Last (TrEMEBLEI 12, Last (TrEMEBLEI 12, Last (Tremester) 23, Last (Tremester) 23, Last (Tremester) 23, Last (Tremester) 23, Last (Mouse).
2 1 166 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1 9wV89 9wV89; 1-NOV-1999 1-NOV-1999 1-NOV-1999 1-NOV-1999 1-NOV-1999 1-NOV-1999 1-NOV-1999 1-NOV-1999 1-NOV-1999 1-NOV-1999 WARTYOCA; WARTYOCA; BEDLINE-9932 BEDLINE-9932 ID J. Okad ID J. Okad
	S S S S S S S S S S S S S S S S S S S

ö

Gaps

; 0

ò g S

qq ઠે q qq

g ò 9 9 à g g

ò

8 8

```
360
                                                                                                                                                                                                                                                                      240
                                                                               240
                                                                                                         300
                                                                                                                                   300
                                                                                                                                                             360
                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 TLSLFSSPPEILIPRTSSTPKTWNDILSSC---EIKTGYNKTVQIPITS-ENSTVGLSNT 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                175
                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09
VGKLRQERNAALEERNVLKEKLLESEKHRKQLIBELQNVKQEAKAVAEETRALRSRIHLA
                                                                                                                                                                                                                                 ITSLDNSPADTSNADIAPAWTDDDSGPQGKISLNPSVRLKAEKLEMALNYLGIQFTKEQR
                                                                  EALREQUOADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADE
                                                                                                                                                             VCKLRQERNAALEERNVLKEKLLESEKHRKQLIEELQNVKQEAKAVAEETRALRSRIHLA
                                                                                                                                                                                                                  EAAQRQAHGMEMDYEEVIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78 MIGVSFERAKSIITRAKL--RSESPWEIAFIROKSYCGHPGNICCPS-POVSEDCGPQTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TFTLLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DIAPAWIDDDSGPQGKISLNPSVRLKAEKLEMALNYLGIÇPTKEQREALREQVQADSKGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADEVGKLRQERNAALEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26.7%; Score 755; DB 4; Length 245; 67.3%; Pred. No. 1e-36; ive 23; Mismatches 49; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Strausberg'R.;
Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases
EMBL; BC041485; AAH41485.1; -.
SEQUENCE 245 AA; 26974 MW; 4E92DDBBFD27DF79 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                   QBIVZ5;
01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Similar to syntaxin binding protein 4.
                                                                                                                                                                                                                                                                                                                                                                                                                         Ž
                                                                                                                                                                                                                                                                                                                                                                                                                         245
                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                                                                           TLILESKELVRSVRAILDMDC 501
                                                                                                                                                                                                                                                                                                                             TLLLESKELVRSVRAILDMDC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 67.33
Matches 165, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RNVLK 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VNTLK 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
                         121
                                                                                                                                   241
                                                                                                                                                                                        301
                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 315
 121
                                                     181
                                                                               181
                                                                                                                                                             301
                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                           ठ
                                                                        Dp
                                                                                               ે
                                                                                                                                                             8
                                                                                                                                                                                 d
                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                  180
                                                                                                                                   180
                                                                                                                                                             240
                                                                                                                                                                                        240
                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DGRLKPGDQLVSINKESMIGVSFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MSDGTASARSSSPLDRDPAFRVITVTKETGLKILGGINRNEGPLVYIHEVIPGGDCYK 60
                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                  EALREQVQADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIB9ILDSQLLPCDSLEADE
 MSDGTASARSSSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPLVYIHEVIPGGDCYK
            PSPQVSEDCGPQTSTFTLLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSP
                                                                                                                       PSPQVSEDCGPQTSTFTLLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSP
                                                                                                                                                                           EALREQVQADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADE
                                                                                                                                                                                                                                                                        VGKLRQERNAALEERNVLKEKLLESBKHRKQLIEELQNVKQEAKAVAEETRALRSRIHLA
                                                                                                                                                                                                                                                                                                                                          EAAQRQAHGMEMDYEBVIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKS
                                                                                                                                                                                                                                                                                                                                                                                 EMARKAFKASTERLLGFIEAIQEVLLDSSAPLSTLSERRAVLASQTSLPLLARNGRSFPA
                                                                                                                                                                                                                                                                                                                                                                                                 EMARKAFKASTERLIGFIEAIQEVILDSSAPLSTLSERRAVLASQTSLPLLARNGRSFPA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MSDGTASARSSSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPLVYIHEVIPGGDCYK
                                                                                                                                                             ITSLDNSPADTSNADIAPAWTDDDSGPQGKISLNPSVRLKAEKLEMALNYLGIQPTKEQR
                                                                                                                                                                                                                                                                                                                            EAAQRQAHGMEMDYBEVIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OBCELI;
OBCELI;
OBCELI;
OBCELI;
OL-MAR-2003 (TEMBLrel. 23, Last sequence update)
OL-MAR-2003 (TEMBLrel. 23, Last sequence update)
OL-MAR-2003 (TEMBLrel. 23, Last annotation update)
Similar to syntaxin binding protein 4.

Mus musculus (Mouse)
Eukaryoca, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      533;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Strausherg R.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC032881; AAH32881.1;
SEQUENCE 533 AA; 58591 MW; 8B6BC19511E3AF09 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89.1%; Score 2522; DB 11;
100.0%; Pred. No. 1.4e-139;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=C57BL/6J; TISSUE=Thymus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541 AEESKEDCPRELTDPKS 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AEESEEDCPRELTDPKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Sim
Matches 501;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                     61
                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                               61
                                                                                                       121
                                                                                                                                 121
                                                                                                                                                             181
                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QBCFL1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QSCFL1
```

g ઠે m

```
1188 A-----KEKL---EKQQQMHIVDMLSKEIQELQSKPDRSAEESDRLRKLMLEWQFQK 1236
                                                                                                                        1336 HDEAARRLLE-PRAPGLCRPPLPRDYEPPSPSPAPGAPPPPPQRNASYLKTQVLSPDSLF 1394
1141 PQETVIRELQPQQQPRTIERRDLQYITVSKEELSS-----GDSLSPDP----WKRD 1187
                                                                                                 358 HLABBAAGROAHGMEMDYEEV -- IRLLEAEVSELKAGLADYSDONKESVQDLRKRVTVLDC 415
                                                                                                                                                                   416 QLRKSEMARKAFKASTERLLGFIEAIQEVILDSSAPLSTLSERRAVLASQTSLPLLARNG 475
                                                                                                                                                                                                                                    476 RSFPATLLLESKELVRSVRAILDMDCLPYGWEEAYTAD-----GIKYFINHVTQTTSWI 529
                                310 AALEERNVLKEKLLESEKHRK----QLIEELQNVKQEAKAVAEETRALRSRI----- 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE FROM N.A.
Vega Q.C., Walton K.M., Dixon J.E.;
Submitted (FEB-1995) to the EMBL/GenBank/DDBJ databases.
-!- CATALYTIC ACTIVITY: PROTBIN TYROSINE PHOSPHATE + H(2)0 = PROTBIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYROSINE + PHOSPHATE.
-!- SIMILARITY: CONTAINS A DOMAIN FOUND IN BAND 4.1, EZRIN, MOESIN RADIXIN, AND TALLIN.
-!- SIMILARITY: BELONGS TO THE NON-RECEPTOR CLASS OF THE PROTEIN-TYROSINE PHOSPHATASE FAMILY.
EMBL; U20807; BAA73516.1; --
HSSP; Q12923; 3PDZ.
InterPro; IPR000299; Band 4.1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterProj iPR001479; PD2.

R InterProj iPR001479; PD2.

R InterProj iPR001479; PD2.

R Pfam; PF00153; Band 41; 1.

R Pfam; PF00162; Y_phosphatase; 1.

R PRINTS; PR00153; BAND41.

R PRINTS; PR00153; BAND41.

R SMART; SM00255; BA1; 1.

R SMART; SM00255; BA1; 1.

R PROSITE; PS00660; BAND 41.; FALSE NEG.

R PROSITE; PS00661; BAND 41.2; FALSE NEG.

R PROSITE; PS00160; PD2.5.

R PROSITE; PS00183; TYR PHOSPHATASE 1; FALSE NEG.

R PROSITE; PS50055; TYR PHOSPHATASE 2; 1.

R PROSITE; PS50055; TYR PHOSPHATASE 2; 1.

R PROSITE; PS50055; TYR PHOSPHATASE PTP; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PROTEIN-TYROSINE PHOSPHATASE.
BY SIMILARITY.
COILED COIL (POTENTIAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1996 (TrEMBLrel. 01, Last sequence update) 01-0CT-2002 (TrEMBLrel. 22, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                          PRT; 2484 AA
                                                                                                                                                                                                                                                                                                                            1395 TAKFVAYN---EEEEBEDC--SLAGPNS 1417
                                                                                                                                                                                                                                                                                                        530 HPVMSALNLSCAEESERDCPRELTDPKS 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BA14 tyrosine phosphatase (EC 3.1.3.48).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  POLY-SER
                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1996 (TrEMBLrel. 01, Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR001478; PDZ.
                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bos taurus (Bovine).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DOMAIN
ACT SITE
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                        g
                              ò
                                                           g
                                                                                                 ò
                                                                                                                            g
                                                                                                                                                            ò
                                                                                                                                                                                                g
                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1081 EEHORWYEKEKARLEEERERKRREQERKLGOMRTOSLNPAPFSPLTAQOMKPEKPSTLOR 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021 PVAVSQPIRTDLPPPPPPPPWHYAGDFDGMSMDLPLPPPPSANOIGLPSAQVAAABRRKR 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182 -----TSLDNSPA----DISNADIAPAWTDDDSGPQGK----- 210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -----QVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADEVGKLRQERN 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                666 AQPLRKEPEIITVTLKKQNGMGLSIVAAKGAGQDKLGIYVKSVVKGGAADVDGRLAAGDO 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LVSINKESMIGVSFEEAKSIITRAKLRSESPWEIAFIROKS-YCGHPGNICCPSP---QV 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      842 PNVANOPPSPGGKSAYASGTTAKITSVSTGNLCTEEGTPPPRPEAYPIPTQTYTRBYFTF 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       902 PASKSODRMAPPONOWPNYEEKPHMHTDSNHSSIAIQRVTRSQEELREDKAYQLERHRIE 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  782 SDRRGSGKPRPKSEGFELYNNSTQNGSPESPQLPWAEYSBPKKLPGDDRLMKNRADHRSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11 SSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPL-VYIHEVIPGGDCYKDGRLKPGDQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            211 -ISLNPSVR------LKAEKLEMAL-----NYLGIOPT----
                                                                             01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-0AR-2003 (TrEMBLrel. 15, Last nunotation update)
01-0AR-2003 (TrEMBLrel. 2) Last nunotation update)
DJ470B24.1.5 (Myeloid/lymphoid or mixed-lineage leukemia (Trithorax (Drosophila) homolog), translocated to, 4 (AF-6) (Isoform 5))
                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 152; Conservative 103; Mismatches 236; Indels 317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 6.9%; Score 195.5; DB 4; Length 1492;
Best Local Similarity 18.8%; Pred. No. 0.0049;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEDCG-----PQTSTFTLLSSPSETLLPKTSSTPQTQDS------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----KEOREALRE-----QVQADSKGTVSFGDFV---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE 1492 AA; 168511 MW; 80207118EF0419BF CRC64;
                                                                                                                                                                                                                                                                                                                     to the EMBL/GenBank/DDBJ databases.
AINS 1 PDZ/DHR DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         162 PSCKA-----IQTKPE-HDKTEHSPI----
                                                    PRT; 1492 AA
                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                     Homo sapiens (Human).
                                                                                                                                                                   (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 262
                                                  09NU93
                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  े
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ΩÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

724

```
961 AAMDRKSDSDMWINQSSSLDSSTSSQEHLNHSSKSVTPASTLTKSGP-GRWKTPAALPAT 1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1020 PVAVSQPIRTDLPPPPPPPPVHYAGDFDGMSMOLPLPPPPSANQIGLPSAQVAAAERRKR 1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1140 PQETVIRELQPQQOPRIIERRDLQYITVSKEELSS------GDSLSPDP-----WKRD 1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |:|::|:||| | | ::||| | : || : || : | | | : || | : || | : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || : || :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         310 AALEERNVLKEKLLESEKHRK----QLIEELQNVKQEAKAVAEETRALRSRI----- 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LVSINKESMIGVSFERAKSIITRAKLRSESPWEIAFIRCKS-YCGHPGNICCPSP---QV 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841 PNVANQPPSPGGKSAYASGTTAKITSVSTGNLCTEEQTPPPRPEAYPIPTQTYTREYFTF 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ------QVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADEVGKLRQERN 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            358 HLAEAAQRQAHGMEMDYEEV--IRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDC 415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             666 AQPLRKEPEIITVTLKKQNGMGLSİVAAKGAGQDKLGIYVKSVVKGG-AADDGRLAAGDQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         211 -ISLNPSVR-------LKAEKLEMAL-----NYLGIQPT-----
                                                                                                                                                                                                                                                                                                                                                                                                                  11 SSPLDRDPAFRVITVTKETGLGLKILGGINRNEGFL-VYIHEVIPGGDCYKDGRLKPGDO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----TSLDNSPA----DISNADIAPAWIDDDSGPQGK----
                                                                                                                                                                                                                                                                                                                       Length 1427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      237 -----KEOREALRE-----QVQADSKGTVSFGDFV----
                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                 SEQUENCE 1427 AA; 161461 MW; 2A14BAC6FA946FB3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEDCG-----PQTSTFTLLSSPSETLLPKTSSTPQTQDS-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                  Query Match 6.6%; Score 187.5; DB 4; Best Local Similarity 18.1%; Pred. No. 0.014; Matches 123; Conservative 101; Mismatches 167;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TrEMBLrel. 15, Created)
(TrEMBLrel. 15, Last seqn
(TrEMBLrel. 23, Last anno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RARQEEERRROEBERTKR 1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           416 QLRKSEMARKAFKASTER 433
                                                                                            Pfam: PF01843; DIL; 1.
Pfam: PF00499; FHA; 1.
Pfam: PF00595; PDZ; 1.
SMART; SM00240; FHA; 1.
SMART; SM00228; PDZ; 1.
PROSITE; PSS0106; PDZ; 1.
                       InterPro; IPR002710; DIL.
InterPro; IPR000253; FHA.
InterPro; IPR001478; PDZ.
     012923;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-OCT-2000 (
01-OCT-2000 (
01-MAR-2003 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q9NU91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Q9NU91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q9NU91
  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gg
                                                                                                                                                                                                                                                                                                                                                                                                                  ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                  1197 KNYMKKPSHLQDGTVNSSEDHCMPRGTPRHISESSFGLSGGLREGGL-----SSQDSR 1249
                                                                                                                                                                                                                                                                                              1306 NTGISDAPDYSDRGDSDMDEATYSSSQDHHIPKKESSSSMNTSNRANFKTFPSSPPKPGD 1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28;
                                                                                                                                                                                                              1084 ASSP-EREITLVNLKKDAQYGLGFQIIGGEKMGRLDLGVFISSVTPGGPADLDGCLKPGD 1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1250 TESASLSQSQVNGFFASH----AADRSWQDSQRGSPSPSVISKATEKKWTSTDSNRSKAK 1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KSYCGHPGNICCPSPQVSED-CGPQ-----TSTFTLLSSPSETLLPKTSSTPQTQDST 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             208 GGKISLNPSVRLKAEKLEMALNYLGIQ----PTKEQREALREQVQADSKGTVSF----GD 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       260 FVQVA-----RSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADEVGKLRQ-ERNAALE 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         314 ERNVLKEKLLESEKHRKOLIEELONVKOEAKAVAEETRALRSRIHLAEA----AOROA 367
                                                                                                                                                                                                                                                                    ------ 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                161 FPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNADIAPA------WTDDDS----GP 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   368 HGMEM------DYBEVIRLLEAEVSELK-AQLADYSDQNKESVQDLRKRVTVLDCQLRK 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420 SEMARKAFKASTERLIGFIRAIQEVILIDSSAPISTISERRAVLASQTSIPLIARNGRSFP 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480 ATLLLESKELVRSVRAILDMDCLPYGWEEAYTADGIKYFINHVTQTTSWIH-PVMSALNL 538
                                                                                                                                                                       68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1476 PEROMITOMIHVKDYSFVTEENTFEVKLLKOSSGLGFSPSREDNVIPEOMNTSIV----
                                                                                                                                                                  10 SSSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPL-VYIHEVIPGGDCYKDGRLKPGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                   Query Match 6.8%; Score 192.5; DB 6; Length 2484; Best Local Similarity 22.8%; Pred. No. 0.014; Matches 142; Conservative 79; Mismatches 253; Indels 149;
                                                                                                                                                                                                                                                               QLVSINKESMIGVSFEEAKSIITRAKLRSESPWEIAFI------
                       276382 MW; 45A92F0D4F1ED13D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Williams S.;
Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: CONTAINS 1 PDZ/DHR DOMAIN.
EMBL; AL049698; CAB76848.1; -.
COILED COIL (POTENTIAL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1613 SKDPPQTACAEQGTSSDENEMSD 1635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S-----CAEESEEDCPRELTD 554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
1793
1761 179
2484 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID=9606;
DOMAIN
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                              109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q9NU94
                                                                                                                                                                                                      Dp
                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                     Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

```
RESULT 8
1035889
1035889
10 03588
AC 03588
DI 01-M
DI 01-M
DI 01-M
DE L-Afi
DE CAfi
DE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               슝
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1193 EKQQQMHIVDMLSKEIQELQSK----PDRSAEESDRLRKLMLEWQFQKRLQESKQKDEDD 1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1136 STLQRPQETVIRELQ-PQQQPRTI--ERRDLQYITVSKEELSSGDSLSPDPWKRDAKEK1 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     962 AAMDRKSDSDMWINQSSSLDSSTSSQEHLNHSSKSVTPASTLTKSGGPGRWKTPAALPATP 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----PGDFVQVARSLFCLQLDEVN-VGVHEIPSILDSQLLPC 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----BKL 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           323 LESEKHRKQLIEELQNVKQBAKAVAEETRALR----SRIHLAEAAQRQAHGMEMDYEE-- 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----VIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKSEMARKAFKA 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         666 AQPLRKEPEIITVTLKKQNGMGLSIVAAKGAGQDKLGIYVKSVVKGGAADVDGRLAAGGQ 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               70 LVSINKESMIGVSFERAKSIITRAKLRSESPWEIAFIROKS-YCGHPGNICCPSP---QV 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ...... 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----TQDSTFPSCKAIQTKPEHDKTEHSPITSLDNS---- 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ------QGKISLNPSVRLKAEKLE 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         226 MALN-----YLGIQPTKEQREALREQVQADSKGTVS-------256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    842 PNVANQPPSPGGKSAYASGTTAKITSVSTGNLCTEEQTPPPRPEAYPIPTQTYTREYPTF 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11 SSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPL-VYIHEVIPGGDCYKDGRLKPGDQ 69
DJ470B24.1.2 (Myeloid/lymphoid or mixed-lineage leukemia (Trithorax (Drosophila) homolog), translocated to, 4 (AF-6) (Isoform 2)) (Fragment).
                                                                                                            Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 6.5%; Score 183.5; DB 4; Length 1333; Best Local Similarity 18.6%; Pred. No. 0.021; Matches 120; Conservative 104; Mismatches 209; Indel8 211;
                                                                                                                                                                                                                           STERLLGFIEAIQEVILDSSAPLSTL-SERRAVLASQTSLPLLA 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        126 SEDCG----PQTSTFTLLSSPSETLLPKTSSTPQ------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE 1333 AA; 150861 MW; 691F95FA834D1AA4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PADTSNADIAP---AWIDDDSGP-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             294 DSLEADEVGKLRQERNAALEERNVLK-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS50106; PDZ; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SMART; SM00240; FHA; 1. SMART; SM00228; PDZ; 1.
                                                                                           Homo sapiens (Human)
                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                           NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
```

```
21 SDRRGSGKPRPKSEGFELYNNSAQNGSPESPQMPWTEYSEPKKLPGDDRLMKNRADHRSS 1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1181 PNVANOPPSPGGKSPYTSGTAAKITSVSTGNLCTEEQTPPPRPEAYPIPTQTYTREYFTF 1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1005 TQPLRKEPBVITVTLKKQNGMGLSIVAAKGAGQDKLGIYVKSVVKGGAADVDGRLAAGDQ 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |: |: |: |-
|: PasksqdrmapvqnqwpnyeekpHmHtesdHasIaiqrvtrsqeelreekvyqlerhRve 1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1360 PVAVSQPIRTDLPPPPPPPPAHYTSDFDGISMDLPLPPPPANQAAPQSAQVAAAERKKRB 1419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LVSINKESMIGVSFEEAKSIITRAKLRSESPWEIAFIRQKS-YCGHPGNICCPSP---QV 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    160 -----TF 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----TSLDNSPA----DTSNADIAPAWTDDDSGPQGK-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11 SSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPL-VYIHEVIPGGDCYKDGRLKPGDQ
                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
MEDLINE=97477397; PubMed=9334353;
Mandai K., Nakanishi H., Satoh A., Obaishi H., Wada M., Nishioka H.,
Itoh M., Mizoguchi A., Aoki T., Fujimoto T., Matsuda Y., Tsukita S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Takai Y.;
A novel actin filament-binding protein with one PDZ domain
localized at cadherin-based cell-to-cell adherens junction.";
J. Cell Biol. 139:517-528(1997).
-: SIMILARITY: CONTAINS 1 PDZ/DHR DOMAIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      6.5%; Score 183; DB 11; Length 1829; 17.8%; Pred. No. 0.034;
1249 EEE------EDDDVDTMLIMQRLEAERR---ARQTAMPAIS 1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PROSITE; PS50106; PDZ; 1.
SEQUENCE 1829 AA; 207676 MW; 45CS97A82F109D6F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             126 SEDCG-----POTSTFILLSSPSETLLPKTSSTPOTODS----
                                                                                                                                                                                                     Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     162 PSCKA------IQTKPE-HDKTEHSPI-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative 108; Mismatches 160;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INTECFPC; IPR000253; FHA.
INTECFPC; IPR000253; FHA.
INTECFPC; IPR000159; RA_domain.
Ffam; PF00484; DIL; 1.
Ffam; PF00489; FHA; 1.
Ffam; PF00789; PR2; 1.
Ffam; PF00789; RA; 2.
SMART; SM00240; FHA; 1.
SMART; SM00214; RA; 2.
                                                                                                                                                                                                     01-JAN-1998 (TrEMBLrel. 05, 01-JAN-1998 (TrEMBLrel. 05, 01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMBL; U83230; AAC53390.1; -- HSSP; Q12923; 3PDZ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 211 -ISLNPSVR-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 InterPro; IPR002710; DIL.
                                                                                                                                                                                                                                                                                                                          Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 118; Conserva
                                                                                                                                                                                                     01-JAN-1998
01-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
```

```
LUSINKESMIGUSFEEAKSIITRAKLRSESPWEIAFIROKS-YCGHPGNICCPSP---QV 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        787 AELQALRESVEEATKAVEVLASRSNTSEQDQAGTEMRVKLLQEENENLQGRSEELERRVA 846
                                                     230 YL-----GIQPTK------EQREALREQVQADSKGTVSFGDFVQVARSLFCLQLDEVN 276
                                                                                                                               277 VGVHEIPSILDSQLLPCDSLEAD-----EVGKLRQERNAALEERNVLKEKLLESEKHRK 330
                                                                                                                                                                                                          331 QLIEELQNVKQEAKAVAEETRALRSRIHLAEAAQRQAHGMEMDYEEVIRLLEAEVSELKA 390
                                                                                                                                                                                                                                                 681 KNLEELFQVKMEREQHQTEIRDLQDQL-----SEM-HDELDSAKRSEDRE-KG 726
                                                                                                                                                                                                                                                                                                                         727 ALIEELLOAKODLODLLIAKEEQEDLLRKRERELTALKGALKEEVSSHDQEMDKLKECYD 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11 SSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPL-VYIHEVIPGGDCYKDGRLKPGDQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        664 AQPLRKEPEIITVTLKKQNGMGLSIVAAKGAGQDKLGIYVKSVVKGGAADVDGRLAAGDÓ
                                                                                                                                                        ------PDSGAK-KISVKTFPSASNTQATPDLLKGQQELTQQTNEETAKQILYN
                                                                                                                                                                                                                                                                                      QLADYSDQNKESVQDLRKRVTVLDCQLRKSEMARKAFK-ASTERLLGFIEAIQEVLLDSS
                                                                                        562 YLKEGSTDNDDATKRKVNLVFEKIQTLKSRAAGSAQGNNQACNSTSEVKDLL-EQKSKLT
                                                                                                                                                                                                                                                                                                                                                                  450 APLSTLSE-----SKELVRSVLASQTSLPLLARNGRSFPATLLLE-----SKELVRSV-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
6.4%; Score 181.5; DB 4; Length 1410;
Best Local Similarity 17.6%; Pred. No. 0.03;
Matches 121; Conservative 97; Mismatches 175; Indels 295; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TISSUE=Amygdala;
Ansorge W., Wirkner U., Mewes H.W., Weil B., Wiemann S.;
Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARITY: CONTAINS 1 PDZ/DHR DOMAIN.
EMBL; ALL61973; CAB82312.1; -.
HSSP; Q12923; 3PDZ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1410 AA; 159577 MW; D4EB73D335DC39E1
                                                                                                                                                                                                                                                                                                                                                                                                                                             494 --- RAILDMDCLPYGWEEAYTADGIKYFINHVTQ 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  847 QLQRQIEDLK-----GDEAKAKETLKKFEGEIRQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last seqt
01-MAR-2003 (TrEMBLrel. 23, Last ann
Hypothetical protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               InterPro: IPR002710; DIL.
InterPro: IPR00253; FHA.
InterPro: IPR001479; PHA.
InterPro: IPR001479; PDZ.
Pfam; PP00498; FHA; 1.
Pfam; PP00595; PDZ; 1.
SMART; SM00240; FHA; 1.
PR08TIS; PS50166; PDZ; 1.
Hypothetical protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                  513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LNSN6C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CNSN60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CNSN60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                  q
                                                                                                                               ઠે
                                                                                                                                                          g
                                                                                                                                                                                                          à
                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                       QQ
                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                      1519 DPWKRDAREKLEKQQQMHIVDMLSKEIHELQNKGDRTAEESDRLRKLMLEWQFQKRLQES 1578
                                                                          277 VGVHEIPSILDSQLLPCDSLEADEVGKLR-QERNAALBERN-----VLKEKLLES---- 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RAKLRSESPWEIAFIR----QKSYCGHPGNICCPSPQVSEDCGPQT--STFTLLSS---- 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 397 ---LQGNSEYLIEFSRNLGKSSEHLLRPSQVCPQRPLSQERRGKQSVGRTFAKLQGAAHG 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----PSETLLPKTSSTPQTQDSTF---PSCKAIQTKPEHDKTEHSPITSLDNSPAD 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             454 ASCAHSRPPOPNIDGKVLETEGSQESTVIRAPSLGAQSKKEEEVKTATATL-MLQNRAAA 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       191 TSNADIAPAWTDDDSGPQGKISLN--PSVR-----LKAEK-----LEMALN 229
LNYLGIQPTK----EQREALRE-----QVQADSKGTVSFGDFVQVARSLFCLQLDEVN 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ninomiya K., Wagatsuma M., Kanda K., Kondo H., Yokoi T., Kodaira H., Furnya T., Takahashi M., Kikkawa E., Omura Y., Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M., Yamazaki M., Sugiyama T., Irie R., Octsuki T., Sato H., Ota T., Wakamateu A., Ishii S., Yamamoto J., Isono Y., Kawai-Hio Y., Saito K., Nishikawa T., Kimura K., Yamashita H., Matsuo K., Nakamura Y., Sekine M., Kikuchi H., Muzakawi K., Ranehori K., Takahashi-Fujil A., Oshima A., Sugiyama A., Kawai B., Suzuki Y., Sugano S., Nagahari K., Masuho Y., Nagai K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                || | | || || | : :| : :| : DGARSRRSSSSSTTPTSANSLYRFLLDDQECAIH---ADNVNRHENRRYIPFLPGTGRDI
                                                                                                   ----EKPSTLQR----PQETV----IRELQPQQPRTIERRDLQYITISKEELSSGDSLSP
                                                                                                                                                    -----EKHRKQ------LIBELQNVKQEAKAVAEETRALRSRI------HLAEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44 --GPLVYIHEVI----PG----GDCYKDGRLKPGDQLVSINKESMIGVSFBEAKSIIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       346 DTGSIPGVDQLIEKFDQKPGLQRRGRSGKRNRINPDDRKRSRSVDSAPPFG-----
                                                                                                                                                                                                                              AQRQAHGMEMDYEEV -- IRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
Hypothetical protein FLJ3111 (Fragment).
Homo sapiens (Human).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6.4%; Score 182.5; DB 4; Length 883; 22.6%; Pred. No. 0.015; tive 87; Mismatches 245; Indels 159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 DGTASARSSS----PLDRDPAFRVITVTKETGLGLKILGGINRNE-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Isogai T.;
"NEDO human cDNA sequencing project.";
Submitted (CGT-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, AKOS6673; BAB71249.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        883 AA; 99335 MW; 5D797322EA4BB467 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                               883 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            al Similarity 22.6
143; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hypothetical protein
                                                                                                                                                                                                                                                                                                                                                1637 EDGR 1640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                           421 EMAR 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                    326
                                                                                                                                                                                                                              363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठ
                                                                                                       g
                                                                                                                                                  ò
                                                                                                                                                                               20
                                                                                                                                                                                                                          \overset{\circ}{\circ}
                                                                                                                                                                                                                                                                 CP
                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                          q
                            g
                                                                          ò
```

25;

21;

```
1022 VAVSQPIRTDLPPPPPPPPPPVHYAGDFDGMSMDLPLPPPPSANQIG----LPS---AQVAAA 1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     962 AAMDRKSDSDMWINQSSSLDSSTSSQEHLNHSSKSVTPASTLTKSGPGRWKTPAAIPATP 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     257 -----VGVH5IPSILDSQLLPC 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ----- 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      323 LESEKHRKQLIBELQNVKQEAKAVAEETRALR----SRIHLAEAAQRQAHGMEMDYEE-- 376
                                                                                                                                                                                                                                                                                                    |:|:: |::||:|| | ::|| | ::|| | ::|| | :| | | :| | | | :| | | | :| | | | :| | | :| | | :| | :| | :| | :| | :| | :| | :| | :| | | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| | :| 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LVSINKESMIGVSFEEAKSIITRAKLRSESPWEIAFIRQKS-YCGHPGNICCPSP---QV 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   156 -----1QDSTFPSCKAIQTKPEHDKTEHSPITSLDNS---- 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1193 EKQQMHIVDMLSKEIQELQSK----PDRSABESDRLRKIMLEWQFGKRLQESKQK 1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    842 PNVANOPPSPGGKSAYASGTTAKITSVSTGNLCTEEQTPPPRPEAYPIPTQTYTREYFTF
                                                                                                                                                                                                                                                      11 SSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPL-VYIHEVIPGGJCYKDGRLKPGDQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------QGKISLNPSVRLKAEKLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----VIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKSEMARK 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutelecstomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=97477397; PubMed=9334353;
Mandai K., Nakanishi H., Satoh A., Obaishi H., Wada M., Nishioka H.,
Itoh M., Mizoguchi A., Aoki T., Fujimoto T., Matsuda Y., Tsukita S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Afadin: A novel actin filament-binding protein with one PDZ domain localized at cadherin-based cell-to-cell adherens junction."; J. Cell Biol. 139:517-528(1997).
                                                                                              6.3%; Score 178; DB 4; Length 1296;
18.5%; Pred. No. 0.043;
tive 94; Mismatches 194; Indels 198;
1
1296 AA; 145808 MW; 9FECCF3CA67D19EC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           126 SEDCG-----PQTSTFTLLSSPSETLLPKTSSTPQ-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        226 MALN----YLGIQPTKEQREALREQVQADSKGTVS-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 294 DSLEADEVGKLRQERNAALEERNVLK-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT; 1663 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                188 PADTSNADIAP---AWIDDDSGP-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; U83231; AACS3391.1; -. HSSP; Q12923; 3PDZ. InterPro; IPR002710; DIL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JAN-1998 (TrEMBLrel. 05,
01-JAN-1998 (TrEMBLrel. 05,
01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                        Best_Local Similarity 18.5%
Matches 110; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=10116;
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                               70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S-Afadin.
                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            035890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           035890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 12
035890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     αq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                               È
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      960 AAMDRKSDSDMWINQSSSLDSSTSSQEHLNHSSKSVTPASTLTKSGP-GRWKTPAAIPAT 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1139 PQETVIRELQPQQOPRIJERRDLQYITVSKEBLSS---GTVCPPDPWRADAKEKLEKQQQ 1195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1196 MHIVD-------MISKEIQELQSKPDRSAEESDRIRKLMLEWQFQKRLQES 1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (019 PVAVSQPIRTDLPPPPPPPPVHYAGDFDGMSMDLPLPPPPSANQIGLPSAQVAAABRRKR 1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        262 -----QVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADEVGKLRQERN 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             310 AALEERNVLKEKLLESEKHRKOLIBELONVKOEAKAVAEETRALRSRI-----HLAEA 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         363 AQRQAHGMEMDYEE-----VIRLLEAEVSELKAQ-----LADYSDQNKESVQD 405
                                                                               840 PNVANQPPSPGGKSAYASGTTAKIISVSTGNLCTEEQTPPPRPEAYPIPTQTYTREYFTF 899
                                                                                                                                                                                                                                                                                                                                                                                           900 PASKSQDRMAPPQNQWPNYEEKPHMHTDSNHSSIAIQRVTRSQEELREDKAYQLERHRIE 959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ------TSLDNSPA----DISNADIAPAWIDDDSGPQGK----- 210
                                                                                                                                                                                                                                                                                                                          ---- 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-OCT-2000 (TrEMBLrel. 15, Created)
01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
01-WAR-2003 (TrEMBLrel. 23, Last annotation update)
DJ470B24 1.1 (Myeloid/lymphoid or mixed-lineage leukemia (Trithorax (Drosophila) homolog), translocated to, 4 (AF-6) (Isoform 1))
(Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (Human).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           211 -ISLNPSVR------LKAEKLEMAL-----NYLGIQPT----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Williams S.;
Submitted (FEB-2000) to the BMBL/GenBank/DDBJ databases.
-! SIMILARITY: CONTAINS 1 PDZ/DHR DOMAIN.
EMBL; AL049698; CAB76822.1; -.
HSSP; Q12923; 3PDZ.
InterPro; IPR001710; DIL.
InterPro; IPR000533; FHA.
InterPro; IPR001678; PDZ.
                                     126 SEDCG----PQTSTFTLLSSPSETLLPKTSSTPQTQDS----
                                                                                                                                                                                                                                                                                                                       162 PSCKA-----IQTKPE-HDKTEHSPI----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRT; 1296 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               :|||
| : | : | : | : |:|
|1296 MRKREA--EDRARQEEERRRQEEERTKR 1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     406 LRKRVTVLDCQLRKSEMARKAFKASTER 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pfam, PF01843; DIL; 1.
Pfam, PF00498; FHA; 1.
Pfam, PF00595; PDZ; 1.
SWART; SM00240; FHA; 1.
SWART; SM00228; PDZ; 1.
PROSITE; PS50106; PDZ; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06NN60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06DN60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DATE TO DESCRIPTION OF THE PROPERTY OF THE PRO
                                                                                                                                                                                                                                                                                                                                                                                       gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    요
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                  a
```

```
PRELIMINARY;
Strongylocentrotus
NCBI_TaxID=7668;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QOTEWB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q8TEW8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 14
Q8TEW8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DE DIE
8
                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                        1525 QQQMHIVDMLSKETHELQ----NKGDRTAEESDRLRRKLMLEWQFQKRLQESKQKDEDDDE 1580
                                                                                                                                                                                                                         : || :: | : || || || || TQPLRKEPEVITVILKKQNGMGLSIVAAKGAGQDKLGIYVKSVVKGGAADVDGKLAAGDQ 1057
                                                                                                                                                                                                                                                                                                                       1294 SGMDRKCDSDMMINQSSSVESSTSSQEHLNHSSKSVTPASTLTKSGPGRWKTPAAVLPTP 1353
                                                                                                                                                                                                                                                                                                                                                                                                                                 1234 PASKSODRMAPVONOWPNYBEKPHMHTESDHASIAIORVTRSOEELREEKVYOLERHRVE 1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1468 LORPOETVIRELO-POOQPRTI--ERRDLOYITISKEELSSGDSLSPDPWKRDAREKLEK 1524
                                                                                                                                                                                                                                                          125
                                                                                                                                                                                                                                                                                                         SEDCG----PQTSTFTLLS-----SPSETLLPKTS------ST 153
                                                                                                                                                                                                                                                                                                                                                        187
                                                                                                                                                                                                                                                                                                                                                                                                         225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         431
                                                                                                                                                                                                         69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       090679;
01-MAY-2000 (TrEMBLrel. 13, Created)
01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
Kinesin-C.
Strongylocentrotus purpusus (Purple sea urchin)
Eukaryota, Metazoa, Echinodermata, Eleucherozoa, Echinozoa,
Echinoidea; Euechinoidea; Echinacea; Echinoida; Strongylocentrotidae;
                                                                                                                                                                                                                                                          LUSINKESMIGUSFEEAKSIITRAKIRSESPWEIAFIROKS-YCGHPGNICCPSP---QV
                                                                                                                                                                                                                                                                                                                                                          -----TODSTFPSCKAIQTKPEHDKTEHSPITSLDNS----
                                                                                                                                                                                                                                                                                                                                                                                1174 PNVANQPPSPGGKSPYTSGTAAKITSVSTGNLCTEEÖTPPPRPEAYPIPTQTYTREYFTF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VOVARSL-----FCLQLDEVNVGVHEIPSILDSQLLPCDSLEADEVGKLRQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1354 VAVSQPIRTDLPPPPPPPPPPAHYTSDFDGISMDL-PLPPPPANQAAPQSAQVAAAERKKRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EHORWYE - - - - KEKARLEEERERKRREGERKLGOMRTOSLNPASFSPLATOAKPEKPST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----LIEELQNVKOEAKAVAEETRALR----SRIHLAEAAQRQAHGMEMDYEE----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----VIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKSEMARKAFKAST
                                                                                                                                                                                                          11 SSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPL-VYIHEVIPGGDCYKDGRLKPGDO
                                                                                                                                                                                                                                                                                                                                                                                                         PADTSNADIAPA---WIDDDSGP------QGKISLNPSVRLKAEKLE
                                                                                                                                                        Similarity 19.6%; Pred. No. 0.063; 26; Conservative 93; Mismatches 214; Indels 209; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                          226 MALN-----YLGIQPTKEQREALREQVQADSKGTVSFGDF-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           307 ERNAALEERNVLKEKL-LESEKHRKQ------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         188980 MW; 65C54B0ED2D0C74C CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           432 ERLLGFIEAIQEVLLDSSAPLSTL-SERRAVLASQTSLPLLA 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRT; 1624 AA
InterPro; IPR000253; FHA.
InterPro; IPR001478; PDZ.
InterPro; IPR000159; RA_domain.
                                                                                                                                                                                   Matches 126; Conservative
                               Pfam; PF01443; DIL; 1.
Pfam; PF01443; DIL; 1.
Pfam; PF00498; FHA; 1.
Pfam; PF00748; RA; 2.
SMART; SM00240; FHA; 1.
SMART; SM00228; PDZ; 1.
PROSTIE; PS0211; RA; 2.
PROSTIE; PS0211; RA; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                          PO----
                                                                                                                                                                                                                                                                                 1058
                                                                                                                                                                                                                                                                                                                                 1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         377
                                                                                                                                                                                                                                   966
                                                                                                                                                                                                                                                                                                         126
                                                                                                                                                                                                                                                                                                                                                          154
                                                                                                                                                                                                                                                                                                                                                                                                         188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         332
                                                                                                                                                           Query Match
                                                                                                                                                                       Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
Q9U679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DA PUTA SO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
 임
                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
1089 AAGAVGGA---KAGGAKTDAKTEKKIQMLQDQNAALKKOVQEEQARAKQFKDDVKEAKAA 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              969 IEALBOEKLONIPPDTAKEINSLYNKVKELERQRDAAQKEAIAKTAEASKINVDFSSTQK 1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1146 GAGDKNATKKIEKQIKDLEKK---LEMETKKHEREAKKATEFEAELKTTAKDRDSLKDEV 1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   282 IPSILDSQL--LPCDSLEA----DEVGKLRQERNAALEE---------314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ------RNVLKEKLLESEKHRKOLI------EELQNVKQEAKAVAEETRALR 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              355 SRIHLAEAAQRQAHGMEMD--YEEVIRLLEAEVSELKAQLAD-----YSDQNKES--- 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ------VQDLRKRVTVLDCQLRKSEM-ARKA--FKASTERLLGFIEAIQEVL 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         446 LDSSAPLSTLSERRAVLASQTSLPLLARNGRSFPATLLLESKELVRSVRAILDMDCLPYG 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      117 NICCESPOVSEDCGPOTSTFTLLSSPSETLLPKTSSTPOTQDSTFPSCKAIQTKPEHDKT 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  177 EHSPITSLDNSPADTSNADIAPAWTD-DDSGPQGKISLNPSVRLKAEKLEMAL--NYLGI 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        856 E---AEGASGAGAAAATFAWANLDLDDDDMEGMSGQMTALQMKIDSLEKELLKEKEAH 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           234 QPTKEQREALREQVQ------ADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHE 281
**ROGER'S CO., Hart C.L., Wedaman K.P., Scholey J.M.;

**ROGER'S G.C., Hart C.L., Wedaman K.P., Scholey J.M.;

**Interior of Kinesin -C. a calmodulin-binding carboxy-terminal Kinesin in animal (Strongylocentrotus purpuratus) cells.";

**J. Mol. Biol. 294:1-8(1999).**

**Interior E. Strongylocentrotus purpuratus) cells.";

**REMBL'S ARPO4841.1; -. **

**REMBL'S PRO135; ARPO4841.1; -. **

**REMBL'S PRO135; Kinesin motor.**

**REMBL'S PRO135; Kinesin, 1. **

**REMBL'S PRO135; Kinesin, 1. **

**REMBL'S PRO139; Kinesi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               796 GGGGDGGVSSEEMEELQARITELEBENESLTDSTRELEBIKEDMEEKIEDLKARIKELEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              64 LKPGDQLVSINKESMI-----GVSFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 6.2%; Score 175; DB 5; Length 1624; Best Local Similarity 20.3%; Pred. No. 0.086; Matches 118; Conservative 109; Mismatches 215; Indels 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ပဲ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Partitioning-defective 3-like protein splice variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     506 WEEAYTADGI -- KYFINHVTQTTSWIHPVMSALNLSCAEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRT; 1136 AA
```

```
completed: October 9, 2003, 11:02:20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Job time : 44.6351 Becs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88
                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Search
  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                   ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          198 PAWTDDDSGPQGKISLNPSVRLKAEKLEMALNYLGIQPTKEQ------REALREQ 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       741 GA-LNCESAPQGNSELE-DMENKARK------VKKTKEKEKKKEKGKLKVKEKKRKE 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3: | | 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----- 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                623 NDNSILHPLGTCSPQDKQKGLLLPNDGWAESEVPPSPTPHSALGLGLEDYSHSSGVDSAV 682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140 SSPSETLLPKTSSTP--QTQDSTFPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNADIA 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            683 YFPDQHINFR-SVTPARQPESINLKASKSMDLVPDESKV-HSLAGQKSEGLSDKSSHSGQ 740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    247 VQADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADEVGKLRQ 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      790 ENEDPERKIKKKGFGAMLR-----FGKKKE 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                307 ERNAALEERNVLKEKLLESEKHRKOLIEELONVKOFAKAVAEETRALRSRIHLAEAAORG 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30 GLGLKILGGINRNEGP--LVYIHEVIPGGDCYKDGRLKPGDQLVSINKESMIGVSFEEAK 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        568 ETLRRSMSMEGNIRGMIQLVILRRPBRPME----DPAECGAFSKPCFENCQNAVTTSRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6.1%; Score 174; DB 4; Length 1136;
19.9%; Pred. No. 0.063;
Live 59; Mismatches 130; Indels 154; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (1)
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
Gao L., Macara 1.G., Joberty G.;
"Multiple splice variants of Par3 and of a novel related gene, Par3L,
                                                                                                                                                                                                                         gene, PAR3L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                   SEQUENCE FROM N.A.

Gao L., Macara I.G., Joberty G.;

Gao L., Macara I.G., Joberty G.;

"Multiple splice variants of PAR3 and of a novel related gene
"Multiple splice variants of PAR3 and of a novel related gene
produce functionally different proceins.";

Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases.

-:-SIMILARITY: CONTAINS 3 PDZ/DHR DOMAINS.

REBL; AP46152; AAL79827.1;

REBL; AP46152; AAL79827.1;

REAL; SPG00528; PDZ; 3.

SMART; SNG00228; PDZ; 3.

REGNERCE 1136 AA; 124884 MW; DE734844F61CBB6B CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----LRSESPWEIAFIRQKSYCG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-DEC-2001 (TrEMBLrel. 19, Created)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Partitioning-defective 3-like protein splice variant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT; 1205 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    85; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       367 AHGMEMDY 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | |: :||
858 ARGL-LDY 864
                       Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88 SIITRAK---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 85; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NCBI_TaxID=9606;
                                                                                                         NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CXN960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CXN960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAR3L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      096NX7
qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dio.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
```

```
17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            133 TSTFTLLSSPSETLLPWTSSTPQTQDS--TFPSCKAIQTKPEHDKTEHSPITSLDNSPAD 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EQVQADSKGTVSFGDFVQVAR--SLFCLQLDEVNVGVHEIP----- 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SIITRAK-------LRSESPWEIAFIRQKSYCGHPGNICCPSPQVSEDCGPQ 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           568 ETLRRSMSMEGNIRGMIQLVILRRPERPME-----DPAECGAFSKPC-----FENC--Q 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                726 QKSESPSK---DFGPTLGLKKSSLESLQTAVAEVRKNDLPFHRPRPHMVRGRGCNESFR 7B2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              843 KKEKGKLKVKEKKRKEENEDPERKI KKKGFGAMLRFGKKKEDKGGKAEQKGTLKHGGLRE 902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            508 GLGVSLKGNKSRETGTDLG:FIKSIIHGGAAFKDGRLRMNDQLIAVNGESLLGKSNHEAM 567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30 GLGLKILGGINRNEGP--LVYIHBVIPGGDCYKDGRLKPGDQLVSINKESMIGVSFEEAK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TSNADIAPAWIDDDSGPQGKISLNP----SVRLKAEKLEMALNYLGIQPTKEQREALR-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SSGVDSAVYPPDQHINFR---SVTPARQPESINLKASK----SMDLVPDESKVHSLAG
                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                              Indels 151;
                                                                                                                                                                                                                                                                                                                                                                    Length 1205;
produce functionally different proteins.";
Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
-!- SIMILARIY: CONTAINS 3 PDZ/DHR DOMAINS.
EMBL, AF428250, AAL30664.1, -.
EMBL, AF428250, AAL30664.1, -.
EMBL, HGNC:14446; ALS2CR19.
InterPro; IRR001478, PDZ.
Ffam; PF00595; PDZ, 3.
SGNART; SM00228; PDZ, 3.
SRART; SM00216; PDZ, 3.
SROWING 1205 AA; 132494 MW; 26E6704CCDCE8CD8 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               334 EELQNVKQEAKAVAEETRALRSRIHLAEAAQRQAHGMEMDY 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ::|| |::||
------EKQARGL-LDY 933
                                                                                                                                                                                                                                                                                                                                                                / Match 6.1%; Score 171.5; DB 4;
Local Similarity 20.4%; Pred. No. 0.095;
Nes 94; Conservative 70; Mismatches 146;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 284 SILDSQLLPCDSLEADEV------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                316 NVLKEKLLESEKHRKQ-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |||::|:|:
EELEKMKEERERIGAKHQELR-
```

```
Sequence 13, Appl Sequence 151, Appl Sequence 151, Appl Sequence 151, Appl Sequence 151, Appl Sequence 181, Appl Sequence 1820, Appl Sequence 1821, Appl Sequence 1820, Appl Sequence 189, Appl Seque
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 48, Appl
Sequence 48, Appl
Sequence 2, Appli
Sequence 1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 8240, Ap
Sequence 8240, Ap
Sequence 23564, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/09647978A
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION:
GENERAL SETTLE OF INVENTION:
GENERAL SETTLE OF 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 2832; DB 20; Length 557; llarity 100.0%; Pred. No. 1.1e-207; Conservative 0; Mismatches 0; Indeis 0;
2 US-09-791-537-144266
0 US-09-647-978A-5
PCT-USO2-22833A-13
PCT-USO2-22833A-13
PCT-USO2-22833A-13
PCT-USO2-22833A-13
PCT-USO2-2283A-13
PCT-USO2-28141-1551
2 US-00-216-697-1551
2 US-00-216-697-1551
PCT-USO1-10139-3931
US-10-416-991-181
US-10-416-991-181
US-10-416-991-181
US-10-416-991-181
US-10-416-991-184
US-10-416-991-184
US-10-416-991-184
US-10-416-991-184
US-10-416-991-184
US-10-416-991-184
US-10-416-991-184
US-10-416-991-184
US-10-416-991-184
US-10-416-991-1852
US-00-491-637-2863
US-10-416-416-1199
US-10-491-416-1199
US-10-491-416-1199
US-10-491-416-1199
US-10-416-1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-686-059-2
US-09-757-781-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1427
1500
1743
1743
1743
1816
1816
1816
1816
1816
1816
549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 557; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-647-978A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-647-978A-2
                                                                                                                                                                                                                                                                                                                                                                                                                 412
1985.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.5
1987.
2832
2109
1345
11345
1193
1193
639.5
574.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                           Sequence 2, Appli
                                                                                                                                                                                                                 October 9, 2003, 10:59:20; Search time 282.013 Seconds (without alignments) 1797.171 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                                          US-09-647-978A-2
2832
1 MSDGTASARSSSPLDRDPAF......LSCAEESEEDCPRELTDPKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         557 20 US-09-647-978A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5728757 segs, 909918778 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                              protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2832
                                                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                              OM protein
                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database
                                                                                                                                                                                                                        Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š.
```

N

```
240
                                                                                                                                   480
                                                                                                                                                                                                                                                                                                            421 EMARKAFYRASTERLIGFIEAIQEVILDSSAPLSTLSERRAVLASQTSLFILARNGRSFPA 480
                                                                                                                                                                                                                                                                                                                                               DGRLKPGDQLVSINYESMIGVSFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PS-PQVSEDCGPQTSTFTLLSSPSETLLPRTSSTPQTQDSTFPSCKAIQTKPEHDKTEHS 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 TSLIEASGEYGPQASTLSLFSSPPEILIPKTSSTPKTNNDILSSC---EIKTGYNKTVQI 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PITSLDNSPADTSNADIAPAWTDDDSGPQGKISLNPSVRLKAEKLE:VALNYLGIQPTKEQ 239
                 121 PSPQVSEDCGPQTSTFTLLSSPSETLLPKTSSTPQTQBSTFPSCKAIQTKPEHDFF 180
                                                                                                                    EALREQUOADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADE 300
                                                                                                                                                                                                                                   EAAQRQAHGMEMDYEEVIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKS 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MSDGTASARSSSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPLVYIHEVIPGGDCYK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VGKLRQERNAALEERNVLKEKLLESEKHRKQLIEELONVKOEAKAVAEETRALRSRIHLA
   PSPQVSEDCGPQTSTFTLLSSPSETILPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSP
                                                                           EMARKAFKASTERLIGFIEAIQEVILDSSAPLSTISERRAVLASQTSLPJLARNGRSFPA
                                                            ITSLDNSPADTSNADIAPAWTDDDSGPQGKISLNPSVRLKAEKLEMALNYLGIQPTKEQR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Warner-Lambert Company
TITLE OF INVENTION: Gene Encoding Syntaxin Interacting Protein
FILE REFERENCE: 09/647,978
CURRENT APPLICATION NUMBER: US/09/647,978A
CURRENT FILING DATE: 2000-10-06
PRIOR APPLICATION NUMBER: PCT/US99/08568
PRIOR FILING DATE: 1999-04-19
PRIOR FILING DATE: 1998-04-20
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 74.5%; Score 2109; DB 20; Best Local Similarity 76.5%; Pred. No. 3e-152; Matches 427; Conservative 49; Mismatches 76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Sequence 5, Application US/09647978A; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                            541 AEESEEDCPRELTDPKS
                                                                                                                                                                                                                                                                                                                                                                                                                                    541 AEESEEDCPRELTDPKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-647-978A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-647-978A-5
                                                                                                                                               241
                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                          181
                                                                                                                    241
                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                          QQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        È
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                   ઠે
                                                                              g
                                                                                                                  à
                                                                                                                                        q
                                                                                                                                                                        ò
                                                                                                                                                                                               Op
                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                             рp
                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 144266, Application US/09791537
GENERAL INFORMATION:
APPLICANT: Bionomix Inc.
APPLICANT: Bobe, Deerek
APPLICANT: Danzer: Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
SOFTWARE: Patentin version 3.0
SEQUEN NO 144266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                    180
                                                                                                                                               180
                                                                                                                                                                                                      240
                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MSDGTASARSSSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPLVYIHBVIPGGDCYK
MSDGTASARSSSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPLVYIHEVIPGGDCYK
                                                          DGRLKPGDQLVSINKESMIGVSFERAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICC
                                                                          PSPQVSEDCGPQTSTFTLLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSP
                                                                                                                                            PSPQVSEDCGPQTSTPTLLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSP
                                                                                                                                                                                         EALREQUQADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADE
                                                                                                                                                                                                                                                    VGKLRQERNAALEERNVLKEKLLESEKHRKQLIEELQNVKQEAKAVAEETRALRSRIHLA
                                                                                                                                                                                                                                                                                                                                                  EAAQRQAHGMEMDYEEVIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKS
                                                                                                                                                                                                                                                                                                                                                                   EAAQRQAHGMEMDYEEVIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TLLESKELVRSVRAILDMDCLPYGWEEAYTADGIKYFINHVTOTTSWIHPVMSALNLSC
                                                                                                                                                                          ITSLONSPADTSNADIAPAWTDDDSGPQGKISLNPSVRLKAEKLEMALNYLGIQPTKEQR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 2832; DB 22;
100.0%; Pred. No. 1.1e-207;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541 AEESEEDCPRELTDPKS 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
Matches 557; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
CORGANISM: Mus musculus
US-09-791-537-144266
                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                              121
                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ΩÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                 Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                       qq
                                                 \delta
                                                                                Ωp
                                                                                                                ò
                                                                                                                                     엄
                                                                                                                                                                        ò
                                                                                                                                                                                              유
장
                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
```

m

Ŋ.

S S

CD ò CC ò

ઠે

DD. ò g ò

ò

```
61 DGRLKPGDQLVSVNKESMIGVSFEEAKSIITRAKLRLESAWEIAPIRQKSDNIQPENLSC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 PS-PQVSEDCGPQTSTFTLLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHS 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 TSLIEASGEYGPQASTLSLFSSPPEILIPKTSSTPKTNNDILSSC---EIKTGYNKTVQI 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      236 HQALRQQVQADSKGTVSFGDFVQVARNLFCLQLDEVNVGAHEISNILDSQLLFCDSSEAD 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300 EVGKLRQERNAALEERNVLKEKLLESEKHRKQLIEELCNVKQEAKAVAEETRALRSRIHL 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 DGRLKPGDQLVSINKBSMIGVSFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180 PITSLDNSPADISNADIAPAWIDDDSGPQGKISLNPSVRLKAEKLEMALNYLGIQPIKEQ 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240 REALREQVQADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEAD 299
                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MSDGTASARSSSPLDRDPAPRVITVTKETGLGLKILGGINRNEGPLVYIHEVIPGGDCYK
                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                   28;
                                                                                                                                                                                                                                                                                                                                                       Ouery Match

47.5%; Score 1345; DB 1; Length 405;
Best Local Similarity 69.5%; Pred. No. 7.3e-94;
Matches 280; Conservative 37; Mismatches 58; Indels 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360 AEAAQRQAHGMEMDYEEVIRLLEAEVSELKAQLADYSDQNKES 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
NAMAYKEY: misc feature
OTHER INFORMATION: Incyte ID No: 2187465CD1
PCT-USO2-22833-13
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION NUMBER: US 60/314,798
PRIOR FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: US 60/316,639
PRIOR FILING DATE: 2001-08-31
PRIOR FILING DATE: 2001-08-31
PRIOR FILING DATE: 2001-09-07
NUMBER OF SEQ ID NOS: 46
SOFTWARE: PERL PROGram
SEQ ID NO 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 13, Application PC/TUS0222833A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LAL, Preeti G.
HONNCHELL, Cynthia D.
FORSYTHE, Ian J.
WALIA, Narinder K.
TANG, Y. Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WARREN, Bridget A.
THANGAVELU, Kavitha
GIETZEN, Kimberly J.
AZIMZAI, Yalda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INCYTE GENOMICS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MALLA,
TANG, Y. Tom
BOROWSKY, Mark L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GORVAD, Ann E.
DUGGAN, Brendan M.
TRAN, Bao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LEE, Ernestine A.
BAUGHN, Mariah R.
                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             YUE, Henry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 5
PCT-US02-22833A-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ρç.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                       356 AEAAQRQAHGMEMDYBEVIRLLEAKITELKAQLADYSDQNKESVQDLKKRIMVLDCQLRK 415
                                                                                                                                                                                                                                                                                                     ATLALESKELVKSVRALLDMDCLPYGWEBAYTADGIKYFINHVTQTTSWIHPVMSVLNL5 535
                                                                236 HQALRQQVQADSKGTVSFGDFVQVARNLFCLQLDEVNVGAHEISNILLDSQLLPCDSSEAD 295
                                                                                                                                            AEAAQRQAHGMEMDYEEVIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRK 419
                                                                                                                                                                                                                                                                              SEMARKAFKASTERLLGFIEAIQEVILDSSAPLSTLSERRAVLASQTSLPLLARNGRSFP 479
                                                                                                                                                                                                                                                                                                                                                         480 ATLLLESKELVRSVRAILDMDCLPYGWEEAYTADGIKYFINHVTQTTSWIHPVMSALNLS 539
                                       240 REALREQVQADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEAD 299
                                                                                                                       EVCKLRQERNAALEERNVLKEKLLESEKHRKQLIEBLQNVKQEAKAVAEETRALRSRIHL 359
    178 PITS-ENSTVGLSNTDVASAWT-ENYGLQEKISLNPSVRFKAEKLEMALNYLGIQPTKEQ 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: LUO, Wen
APPLICANT: LERH-MASON, Patricia M.
TITLE OF INVENTION: RECEPTORS AND MEMBRANE ASSOCIATED PROTEINS
FILE REFERENCE: PP-1082 PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: PCT/US02/22833
CURRENT FILING DATE: 2002-07-16
PRIOR APPLICATION NUMBER: US 60/306,020
PRIOR FILING DATE: 2001-07-17
PRIOR FILING DATE: 2001-07-27
PRIOR PELICATION NUMBER: US 60/309,702
PRIOR FILING DATE: 2001-08-02
PRIOR APPLICATION NUMBER: US 60/311,476
PRIOR APPLICATION NUMBER: US 60/311,476
PRIOR APPLICATION NUMBER: US 60/311,716
PRIOR APPLICATION NUMBER: US 60/311,716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 60/311,718
FILING DATE: 2001-08-10
APPLICATION NUMBER: US 60/311,551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13, Application PC/TUS0222833 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LI, Joana X RICHERDSON, Thomas W. RICHERDSON, VICKI S. ZEBARJADIAN, Yeganeh TRAN, Uyen K. YAO, Monique G. PETERSON, David P.
                                                                                                                                                                                                                                                                                                                                                                                                                                         540 CAEESEEDCPRELTDPKS 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LAL, Preeti G.
HONNCHELL, Cynthia D.
FORSYTHE, Ian J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WARREN, Bridget A.
THANGAVELU, Kavitha
GIETZEN, Kimberly J.
AZIMZAI, Yalda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INCYTE GENOMICS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WALIA, Narinder K.
TANG, Y. Tom
BOROWSKY, Mark L.
BARROSO, Ines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                :||:||||| : ||
536 RSEENEEDCSRELPNOKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GORVAD, Ann E.
DUGGAN, Brendan M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LEE, Ernestine A.
BAUGHN, Mariah R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YUE, Henry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GORVAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TRAN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCT-US02-22833-13
                                                                                                                     300
                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                   416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT
```

```
SMIGVSFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICCPSPQVSEDCGPQTSTF 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               137 TLLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNADI 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     197 APAWIDDDSGPQGKISINPSVRLKAEKLEMALNYLGIQPTKEQREALREQVQADSKGTVS 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEADEVGKLRQERNAALBERN 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             317 VLKEKLLESEKHRKOLIEELQNVKOEAKAVAEETRALRSRIHLAEAAQRQAHGMEMDYEE 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         377 VIRLIBAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKSEMARKAFKASTERLLG 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           437 FIEAIQEVILDSSAPLSTLSERRAVLASQTSLPLLAPNGRSFPATLLLESKELVRSVRAI 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----SERRAVLASQTSLTPLGRNGRSIPATLALESKELVKSVRAL 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ------SQARKEEKKEEMALNYLGIQPTKEQHQALRQQVQADSKGTVS 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 DPAFRVITVTXETGLGLXILGGINRNEGPLVYIHEVIPGGDCYKDGRLXPGDQLVSINKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels 204; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Garcia, Veronica
APPLICANT: Jones, Lee William
APPLICANT: Stache-Crain, Birgit
APPLICANT: Stache-Crain, Birgit
TITLE OF INVENTION: ISOLATED FROM HUMAN PROSTATE
TITLE OF INVENTION: ISOLATED FROM HUMAN PROSTATE
TITLE OF INVENTION: ISOLATED FROM HUMAN PROSTATE
TITLE OF INVENTION: 1SOLATED FROM HUMAN PROSTATE
CURRENT APPLICATION NUMBER: PCT/US02/28214
CURRENT APPLICATION NUMBER: 60/254,648
PRIOR PLILING DATE: 2000-12-07
PRIOR APPLICATION NUMBER: 60/254,648
PRIOR FILING DATE: 2001-13-13
NUMBER OF SEQ ID NOS: 1568
SOFTWARE: FastSEO for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              42.1%; Score 1193; DB 1; Length 300; 51.8%; Pred. No. 2.1e-82; ive 18; Mismatches 21; Indels 20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1551, Application PC/TUS0228214 GENERAL INFORMATION:
                                                                                                                                                                                             Garcia, Pablo Dominguez
Kassam, Altaf
Lamson, George
Scott, Beth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 SMIGVSFEEAKSIITGAKL----
                                                                                                                                                                                                                                                                                                Drmanac, Radoje
Crkvenjakov, Radomir
Dickson, Mark
Drmanac, Snezana
Labat, Ivan
                                                                                                                                                                                                                                                                                                                                                                                                                              Leshkowitz, Dena
Kita, David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 51.8%
Matches 261; Conservative
                                                                                                                                                                       APPLICANT: Escobedo, Jaime APPLICANT: Garcia, Pablo 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCT-US02-28214-1551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ ID NO 1551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PS-PQVSEDGGPQTSTFTLLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHS 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DGRLKPGDQLVSINKESMIGVSFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61 DGRLKPGDQLVSVNKESMIGVSFEEAKSIITRAKLRLESAWEIAFIRQKSDNIQPENLSC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240 REALREQVQADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEAD 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      236 HQALRQQVQADSKGTVSFGDFVQVARNLFCLQLDEVNVGAH5ISNILDSQLLPCDSSEAD 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EVGKLROERNAALSERNYLKEKLLESEKHRKOLIEBLONYKOEAKAVAEETRALRSRIHL 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MSDGTASARSSSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPLVYIHEVIPGGDCYK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PITSLDNSPADTSNADIAPAWTDDDSGPQGKISLNPSVRLKAEKLEMALNYLGIQPTKEO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28;
                                                                                                                                                                                          APPLICANT: LUO, Wen
APPLICANT: LEHR-MASON, PALTICIA M.
TITLE OF INVENTION: RECEPTORS AND MEMBRANE ASSOCIATED PROTEINS
FILE REFERENCE: PF-1082 PCT
CURRENT APPLICATION NUMBER: PCT/US02/22833A
CURRENT FILING DATE: 2002-09-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 47.5%; Score 1345; DB 1; Length 405; Best Local Similarity 69.5%; Pred. No. 7.3e-94; Matches 280; Conservative 37; Mismatches 58; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AEAAORQAHGMEMDYBEVIRLLEAEVSELKAQLADYSDQNKES 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    334 AEAAQROAHGMEMDYEEVIRLLEAKITELKAQLADYSDQNKVS 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No: 2187465CD1
                                                                                                                                                                                                                                                                                                                                 CURRENT FILING DATE: 2004-09-1,
PRIOR PREING DATE: 2001-07-17
PRIOR FILING DATE: 2001-07-17
PRIOR APPLICATION WUMBER: US 60/306,179
PRIOR APPLICATION WUMBER: US 60/309,702
PRIOR FILING DATE: 2001-08-02
PRIOR FILING DATE: 2001-08-02
PRIOR FILING DATE: 2001-08-10
PRIOR FILING DATE: 2001-08-10
PRIOR APPLICATION WUMBER: US 60/311,718
PRIOR APPLICATION WUMBER: US 60/311,551
PRIOR APPLICATION WUMBER: US 60/311,551
PRIOR FILING DATE: 2001-08-10
PRIOR FILING DATE: 2001-08-10
PRIOR FILING DATE: 2001-08-10
PRIOR FILING DATE: 2001-08-11
PRIOR APPLICATION WUMBER: US 60/314,798
PRIOR APPLICATION WUMBER: US 60/316,639
PRIOR APPLICATION WUMBER: US 60/316,639
PRIOR PRILING DATE: 2001-08-31
PRIOR PLILING DATE: 2001-08-31
Joana X. Thomas W.
                                                                 ELLIOTT, Vicki S.
ZEBARJADIAN, Yeganeh
                                                                                                                      TRAN, Uyen K.
YAO, Monique G.
PETERSON, David P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCT-US02-22833A-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
```

g ò g ö QC. ò g ò q ઠે ρp ò

े

```
APPLICANT: Spier, Eugene
APPLICANT: Greenberg, Simon
APPLICANT: Greenberg, Simon
APPLICANT: Greenberg, Simon
APPLICANT: Mang, Yu
APPLICANT: NUCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS, AND
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: CLORO866
CURRENT FILING DATE: 2000-10-02
CURRENT FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 451 PLSTLSERRAVIASQTSLPLLARNGRSFPATILLESKELVRSVRAILDMDCLPYGWEEAY 510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          277 VGVHBIPSILDSQLLPCD----SL--EADEVGKLRQERNAALEERNVLKEKLLESEKHRK 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       331 QLIEELQNVKQEAKAVAEETRALRSRIHLAEAAQRQAHGMEMDYEEVIRLLEAEVSELKA 390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              143 QLADYSDQNK-----AIQEVFSDNST 163
437 FIEALQEVLLDSSAPLSTLSERRAVLASQTSLPLLARNGRSFPATLLLLESKELVRSVRAI 496
                                     391 QLADYSDQNKESVQDLRKRVTVLDCQLRKSEMARKAFKASTERLLGFIEAIQEVLLDSSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      49; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 22.6%; Score 639.5; DB 32; Length 256; Best Local Similarity 60.2%; Pred. No. 4.6e-40; Matches 150; Conservative 17; Mismatches 33; Indels 49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FCT-USO1-47004-181

Sequence 181, Application PC/TUS0147004

GENERAL INFORMATION:

APPLICANT: Hyseq, Inc

TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES

FILE REFERENCE: 21272-090

CURRENT APPLICATION NUMBER: PCT/US01/47004

CURRENT APPLICATION NUMBER: 09/728,952

PRIOR PILING DATE: 2000-11-30

NUMBER OF SEQ ID NOS: 186

SOFTWARE: Patentin version 3.0

SEQ ID NO 181
                                                                                                                                          497 LDMDCLPYGWEEAYTADGIKYFIN 520
                                                                                                                                                                                   LDMDCLPYGWEEAYTADGIKYFIN 300
                                                                                                                                                                                                                                                                                                                                                                                  Sequence 455, Application US/60236804
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ladunga, Steven
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            511 -- TADGIKY 517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           224 DGTLDLVKY 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT
; ORGANISM: HUMAN
US-60-236-804-455
                                                                                                                                                                                                                                                                                                                      RESULT 8
US-60-236-804-455
                                                                          236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ਨੂ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                        g
                                                                                                                                          ઠે
                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         77 SMIGVSFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICCPSPQVSEDCGPQTSTF 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            137 TLLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNADI 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               257 FGDFVQVARSLFCLQLDEVNYGVHEIPSILDSQLLPCDSLEADEVGKLRQERNAALEERN 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           317 VLKEKLLESBKHRKQLIEELQNVKQEAKAVAEETRALRSRIHLAEAAQRQAHGMEMDYEE 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  377 VIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKSEMARKAFKASTERLLG 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              197 APAWTDDDSGPQGKISLNPSVRLKAEKLEMALNYLGIOPTKEOREALREOVQADSKGTVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    155 ---EKLLESDKQKKQLTEELQNVKQEAKAVVESTRALRSRIHLAEAAQRQAHGMEMDYEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 42.1%; Score 1193; DB 26; Length 300; Best Local Similarity 51.8%; Pred. No. 2.1e-82; Matches 261; Conservative 18; Mismatches 21; Indels 204;
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Lamson, George
APPLICANT: Scott, Beth
APPLICANT: Scott, Beth
APPLICANT: Scott, Beth
APPLICANT: Crkvenjakov, Radomir
APPLICANT: Dickson, Mark
APPLICANT: Dickson, Mark
APPLICANT: Dickson, Mark
APPLICANT: Labat, Ivan
APPLICANT: Leshkowitz, Dena
APPLICANT: Leshkowitz, Dena
APPLICANT: Garcia, Veronica
APPLICANT: Garcia, Neronica
APPLICANT: Garcia, 100-1625
TITLE OF INVENTION: 150LATED FROM HUMAN PROSTATE
FILE REFRENCE: 2300-16252
CURRENT APPLICATION NUMBER: 103/10/012,697
CURRENT FILING DATE: 2000-12-07
PRIOR FILING DATE: 2001-03-13
NUMBER OF SEQ ID NOS: 1568
SOFTPARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             277 LDMDCLPYGWEEAYTADGIKYFIN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           212 VIRLLEAKITELKAQLADYSDQNK---
                                                                                                                                                                                                                                               Sequence 1551, Application US/10012697 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                          Escobedo, Jaime
Garcia, Pablo Dominguez
Kassam, Altaf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: PRT
CORGANISM: Homo sapiens
US-10-012-697-1551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ----- 08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
```

ò g g ò OO O ò gg ò Ω à qq

```
; Sequence 3931, Application US/09764891
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                             NAME/KEY: SITE
LOCATION: (149)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: (149)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 13
US-09-764-891-3931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                        TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 े
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ω̈
                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82 SFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICCPS-PQVSEDCGPQTSTFTLLS 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141 SPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNADIAPAW 200
                                                                                                                                                                                                                                                            61 SFEEAKSIITRAKLRLESAWEIAFIRQKSDNIQPENLSCTSLIEASGEYGPQASTLSLFS :20
                                                                                                                                                                                                                                                                                                           141 SPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNADIAPAW 230
                                                                                                                                                                                                                                                                                                                                 61 SFEEAKSIITRAKLRLESAWEIAFIROKSDNIQPENLSCTSLIEASGEYGPQASTLSLFS 120
                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICCPS-PQVSEDCGPQTSTFTLLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22 VITVTKETGLGLKILGGINRNEGPLVYIHEVIPGGDCYKDGRLKPGDQLVSINKESMIGV
                                                                                                                                                             22 VITVTKETGLGLKILGGINRNEGPLVYIHEVIPGGDCYKDGRLKPGDQLVSINKESMIGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 217;
                                                                                        Length 217;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1354, Application PC/TUS0101329
GENERAL INFORMATION:
APPLICAT: Human Genome Sciences, Inc., et al.
APPLICATION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PA120PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tch
al Similarity 59.8%; Score 574.5; DB 30; Length
al Similarity 59.8%; Pred. No. 3.4e-35;
122; Conservative 20; Mismatches 57; Indels
                                                                                                                            57; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES
FILE REPERANCE: 21272-090
CURRENT APPLICATION NUMBER: US/10/416,991
CURRENT FILING DATE: 2003-05-16
PRIOR APPLICATION NUMBER: 09/728,952
                                                                                        DB 1;
                                                                                                        .4e-35;
                                                                                        20.3%; Score 574.5; 1
59.8%; Pred. No. 3.4e.
ive 20; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201 TDDDSGPQGKISLNPSVRLKAEKL 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       177 YSAHKGTTPSPETASTSRLKRDSV 200
                                                                                                                                                                                                                                                                                                                                                                                    201 TDDDSGPQGKISLNPSVRLKAEKL 224
                                                                                                                                                                                                                                                                                                                                                                                                              177 YSAHKĞTTPSPETASTSRLKRDSV 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
10s-10-416-991-181
Sequence 181, Application US/10416991
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 186
SOFTWARE: Patentin version 3.0
SEQ ID NO 181
LENGTH: 217
                                                                                                        Best Local Similarity 59.8
Matches 122, Conservative
                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 122; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCT-US01-01329-1354
                                                       PCT-US01-47004-181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-416-991-181
LENGTH: 217
                                                                                                                                                                                                                                      82
                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठे
                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                             ਨੇ
                                                                                                                                                                                                                                                                                                                                             CO.
                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
61 LFSSPPEILIPKTSSTPKTNNDILSSC---EIKTGYNKTVQIPITS-ENSTVGLSNTDVA 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids PCT-US01-01339-3931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         79 IGVSFBEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICCPS-PQVSEDCGPQTSTFT 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        138 LLSSPSETLLPKISSTPQTQDSTFPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNADIA 197
                                                                                                                                                                                                                                                                                                                                              ) OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids PCT-USO1-01329-1354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              79 IGVSFEEAKSIITRAKLRSESPWEIAPIRQKSYCGHPGNICCPS-PQVSEDCGPQTSTFT 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                138 LLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNADIA 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 IGVSFBEAKSIITRAKLRLESAWEIAFIRQKSDNIQPENLSCTSLIEASGEYGPQASTLS 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       y Match 14.5%; Score 412; DB i; Length 150;
Local Similarity 61.4%; Pred. No. 5.5e-23;
hes 94; Conservative 14; Mismatches 39; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
14.5%; Score 412; DB 1; Length 150;
Best Local Similarity 61.4%; Pred. No. 5.5e-23;
Matches 94; Conservative 14; Mismatches 39; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION Genome Sciences, Inc., et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies FILE REFERENCE: PC006PCT
CURRENT APPLICATION NUMBER: PCT/US01/01339
CURRENT FILING DATE: 2001-03-17
NUMBER OF SEQ ID NOS: 10231
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SAWT-ENYGLOEKISLNPSVRFKAEKLEMALNY 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              198 PAWTDDDSGPQGKISLNPSVRLKAEKLEMALNY 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               198 PAWTDDDSGPQGKISLNPSVRLKAEKLEMALNY 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                117 SAWT-ENYGLOEKISLNPSVRFKAEKLEMALNY 148
CURRENT APPLICATION NUMBER: PCT/US01/01329
CURRENT FILING DATE: 2001-01-17
NUMBER OF SEQ ID NOS: 3506
SOFTHARE: PatentIn Ver. 2.0
SEQ ID NO 1354
LENGTH: 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCT-US01-01339-3931
; Sequence 3931, Application PC/TUS0101339
; GENERAL INFORMATION:
```

```
RESULT 15
US-10-205-303-1354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc feature LOCATION: (149) COCHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 LFSSPPEILIPKTSSTPKTNNDILSSC---EIKTGYNKTVQIPITS-ENSTVGLSNTDVA 116
                                                                                                                                                                                                                                                                                         NAME/KEY: SITE

LOCATION: (149)

COTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-764-891-3931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    79 IGVSFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICCPS-PQVSEDCGPQTSTFT 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               79 IGVSFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICCPS-PQVSEDCGPQTSTFT 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         138 LLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNADIA 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       138 LLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPEHDKTEHSPITSLDNSPADTSNADIA 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 IGVSFEEAKSIITRAKLRLESAWEIAFIRQKSDNIQPENLSCTSLIEASGEYGPQASTLS 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                       6; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                    Ouery Match
14.5%; Score 412; DB 22; Length 150;
Best Local Similarity 61.4%; Pred. No. 5.5e-23;
Matches 94; Conservative 14; Mismatches 39; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14.5%; Score 412; DB 26; Length 150; 61.4%; Pred. No. 5.5e-23;
APPLICANT: Rosen et al.

TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies FILE REFRENCE: PCOOR CURRENT APPLICATION NUMBER: US/09/764,891
CURRENT APPLICATION NUMBER: US/09/164,891
CURRENT FILING DATE: 2001-01-17
Prior application data removed - consult FALM or file wrapper NUMBER OF SEQ ID NOS: 10231
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
GENERAL INFORMATION:
TATLE OF INVENTION:
TATLE OF INVENTION:
CURRENT APPLICANT:
CURRENT APPLICATION WIGHER: US/10/080,090
CURRENT APPLICATION WIGHER: US/10/080,090
CURRENT APPLICATION VENEVAL - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 3506
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAWTDDDSGPQGKISLNPSVRLKAEKLEMALNY 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                198 PAWTDDDSGPQGKISLNPSVRLKAEKLEMALNY 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94; Conservative
                                                                                                                                                                                                                                                 ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-080-030-1354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-080-090-1354
                                                                                                                                                                                                                             TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
```

```
US-10-205-303-1354
Sequence 1354, Application US/10205303
SERGEAL INFORMATION:
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REPERBNCE: PAL20C2
CURRENT APPLICATION NUMBER: US/10/205,303
CURRENT FILING DATE: 200-70-26
Prior Application removed - See File Wrapper or Palm
CURRENT FILING DATE: 200-70-26
NUMBER OF SEO ID NOS: 3566
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 1354
TYPE: PAT
THE DATE: NUMBER OF SEO ID NOS: 3566
SOFTWARE: PATURE:
LENGTH: STATURE:
NAME/KEY: misc feature
LOCATION: (149)
COANION: (140)
COANI
```

```
October 9, 2003, 10:57:36 ; Search time 40.6459 Seconds (without alignments) 2175.142 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                        US-09-647-978A-2
2832
1 MSDGTASARSSSPLDRDPAF......LSCAEESEEDCPRELTDPKS 557
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                       1107863 seqs, 158726573 residues
                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                      OM protein - protein search, using sw model
                                                                                                                                                                                            BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                            Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                       Title:
Perfect score:
                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                 Run on:
```

	Description	Murine syntaxin-4	Mouse syntaxin 4 i	Human Syntaxin 4 i	Human novel polyne	Human testicular a	Human reproductive	Human syntaxin 4 i	Novel human diagno	Novel human diagno
SUMMARIES	ID	AAY52446	AA015046	AA015047	ABG66753	ABB95970	AAM95273	AA015045	ABG03416	ABG10928
	80	21	23	23	23	22	22	23	22	22
	Query Match Length DB ID	557	557	554	217	150	150	72	549	1743
مد	Query Match 1	100.0	100.0	70.6	20.3	14.5	14.5	9.8	6.7	9.9
	Score	2832	2832	2000.5	574.5	412	412	243	188.5	187.5
	Result No.		7	М	4	ហ	œ	7	80	9

Novel human diagno Actin-filament bin Aspergillus fumiga Chimeric ALL-1/AF- Ras-binding protei Human ASIP-related	Amino acid sequenc Human protein tyro Intracellular prot Human PTPL1 phosph Drosophila melanog A rod shortened dy Drosophila melanog Human cytoskeleton Drosophila melanog Drosophila melanog Drosophila melanog Inner centromere p An Fractin-combine Drosophila melanog Human protein sequ Protein MYH11 diff Novel human secret Human activated T- Human activated T-		Yayaxan- dinteracting protein; SYNIP; glucose; transport; GLUT4; vesicle translocation; insulin; regulations, SNARE; SNARE. like; soluble N-ethylmaleidide-sensitive factor attachment protein receptor; soluble N-ethylmaleidide-sensitive factor attachment protein receptor; glucake; syntaxin + y VANE; competition; binding; glucose storage; glucose utilisation; recombinant expression; gene therapy; diagnostic; ancagonist; agonist; diabetes; glycogen storage disease; obesity; antagonist; agonist; diabetei; glycogen storage disease; obesity; inpulin resistance; antidiabetic; anorectic; hypotensive; antiarteriosclerotic.  Mus sp.  Location/Qualifiers  Domain /note= "PDZ domain"  Domain /note= "Calcium-binding EF-hand domain"  Domain /note= "Tandem coiled coil domains"  /note= "WW domain"  Domain /note= "WW domain"
ABG12284 AAY07242 ABJ26182 AAR66457 AAW24094 AAW99746	AAB19343 AAA71498 AAA790272 AAA90272 AAA50272 AAA50276 AAB61025 AAB61025 AAB64847 ABB64863 ABB64863 ABB64863 AAB59344 AAB59344 AAM25750 AAU32041	ABP55413 ABP55393 AAB42620 AAB33672 ABB77435 ABB61144 ABB61173 AAB473939 AAB73939 AA	in, SYNIP; in, regular sitive fact sitive fact and expres s; glycogen syndrome; h stic; anoxe lifiers lomain" lum-binding em coiled c
222112 204911	355355555555555555555555555555555555555	24 22 22 22 23 23 23 23 24 37 37 37 37 37	nsulnsulnsulnsulnsulnsulnsulnsulnsulnsul
82 117 117 117 117	2466 2466 2466 2466 2466 333 1310 6110 4411 4411 1095 1095 1875 1875 1875 1875 1876 1877 1877 1877 1877 1877 1877 1877	1384 24 1404 24 460 21 1404 24 160 21 1630 22 1038 23 1266 23 1068 23 1068 23 1098 22 2633 22 2633 22 2633 22 2633 22 interacting	cting p leidide 4; VAMP 4; VAMP 5; dia 5; dia 1c ovar 1c ova 1c ova 1c ova 1c ova 1c ova 1c ova 1c ova 1c ovar
	。 。 。 。 。 。 。 。 。 。 。 。 。 。 。 。 。 。 。	5.5 5.5 5.5 5.5 5.5 5.4 5.4 5.4 6.5 6.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7.4 7	nintera nintera ethylma ethylma ethylma i agoni i agon
184.5 183 181 178 178 178	1	4 155.5 155.5 155.5 165.5 165.5 165.5 165.5 165.5 17.1 17.1 17.3 163.5 4 153.5 4 153.5 4 153.5 4 153.5 4 153.5 7 153.5	Vesicle transcript of the vesicle transcript
10 11 12 13 14	116 118 118 118 118 118 118 118 118 118	wwwwwa44444 FG	KW Syn KW uptr

```
2-SEP-2000; 2000US-0668313.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-SEP-2001; 2001WO-US29251.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Monia BP, Freier SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-401986/43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N-PSDB; ABQ62254.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200224864-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AA015046;
                                                                  301
                                                                                                                                    361
                                                                                                                                                                       361
                                                                                                                                                                                                       421
                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA015046
                                                                                               g
                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                       음
                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                            ò
                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                    This sequence represents murine syntaxin-4 interacting protein (SYNIP), which is a novel insulin-regulated SNARE-like protein directly involved in the regulation of glucose transport and GLUT4 glucose transporter vesicle translocation. Insulin induces translocation of GLUT4 from the intracellular low density microsomal compartment to the cell surface, GLUT4 translocation playing an important role in the uptake of glucose intracellular low density microsomal compartment to the cell surface, GLUT4 translocation between the vesicle membrane SNARE of soluble N-ethylmaledide-sensitive factor attachment protein receptor), VAMP2, and the target membrane SNARE, syntaxin-4. SYNIPs competitively bind to syntaxin-4, preventing the ligand from interacting with its compare intracellular receptor, and are only expressed in cells which exhibit insulin-responsive glucose transport and GLUT4 translocation. Compare intracellular receptor, and are only expressed in cells which exhibit insulin-responsive glucose transport and GLUT4 translocation. SYNIP proteins of decrease in the binding affinity of SYNIP syntaxin-4 complex via a corresponsive glucose transport and GLUT4 translocation. SYNIP proteins cand uncleotides may be used in translocation or abnormal gluth translocation or abnormal GLUT4 translocation or abnormal GLUT4 translocation or abnormal GLUT4 proteins may be used to recombinantly and proteins may be used to identify antagonists which will prevent the binding of SYNIP to syntaxin-4, thereby increasing compared the states of the sease states of glucose transport, which will prevent the binding of SYNIP to syntaxin-4, thereby increasing transport may a source of diagnostic probes and primers. Which will be transport which will be because the translocation or identify antagonists the translocation or identify antagonists or shown which while translocation will be a secure or to decrease glucose transport which will be a secure or agonists which will be a secure or agonists of the secure or the secure or the secure or th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MSDGTASARSSSPLDRDPAFRVITVTKETGLGLKILGGINRNEGPLVYIHEVIPGGDCYK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Note: SYNIP cDNAs (mouse and human), and an additional SYNIP protein are also claimed, but the sequences are not given in the specification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    transport. The diseases that may be treated include diabetes (particularly type II), glycogen storage diseases, obesity, polycystic ovarian syndrome, hypertension, atherosclerosis and other diseases associated with insulin resistance.
                                                                                                                                                                                                                                                         Novel polypeptides and polymucleotides used for diagnosis of syndromes involving abnormal levels of glucose or abnormal GLUT4 translocation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MSDGTASARSSSPLDRDPAPRVITVTKETGLGLKILGGINRNEGPLVYIHEVIPGGDCYK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DGRLKPGDQLVSINKESMIGVSFERAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 DGRLKPGDQLVSINKESMIGVSFEEAKSIITRAKLRSESPWEIAFIRQKSYGGHPGNICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 PSPQVSEDCGPQTSTFTLLSSPSETLLPKTSSTPQTQDSTFPSCKAIQTKPRHDKTEHSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 ITSLDNSPADTSNADIAPAWTDDDSGPQGKISLNPSVRLKAEKLEMALNYLGIQPTKEQR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 2832; DB 21; 100.0%; Pred. No. 1.9e-215;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                        ä
                                                                                                                                                                                        Syn
                                                                                                                                                                                        Pessin JE, Saltiel AR,
                                                                                                                                                                                                                                                                                                          Claim 6; Fig 1A; 51pp; English
                                                                                                 98US-0082454
                                                                                                                                                         IOWA ) UNIV IOWA RES FOUND
                                                                  99WO-US08568
                                                                                                                                    (WARN ) WARNER LAMBERT CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 100.
Best Local Similarity 100.
Matches 557; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            557 AA;
                                                                                                 20-APR-1998 7
W09954465-A2
                                                                  19-APR-1999;
                                   28-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seguence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                        Min J,
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6
```

```
360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EALREQVQADSKGTVSFGDFVQVARSLFCLCLDEVNVGVHEIPSILDSQLLPCDSLEADE 300
                                                                241 BALREQVQADSKGTVSFGDFVQVARSLFCLQLDEVNVGVFBIPSILDSQLLPCDSLBADE 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention comprises antisense oligonucleotides designed to inhibit expression of Syntaxin 4 interacting protein. The antiseanse oligonucleotides of the invention are useful for inhibiting the expression of Syntaxin 4 interacting protein in cells or tissues. The antisense oligonucleotides are also useful for treating an animal having a disease or condition associated with Syntaxin 4 interacting protein (e.g. diabetes, obesity or a skeletal muscle disorder). The antisense oligonucleotides can also be used to prevent or delay infection, inflammation and tumour formation. The present amino acid sequence represents a mouse Syntaxin 4 interacting protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mouse, antisense gene therapy, Syntaxin 4 interacting protein, antisense oligonucleotide; diabetes; obesity; skeletal muscle disorder; inflammation; tumour formation.
                                                                                                                                                                                                                                                                                                                                                Novel antisense compound that hybridizes and inhibits nucleic acid molecule encoding Syntaxin 4 interacting protein, useful for treating diabetes, obesity and skeletal muscle disorder
                                                                                                                                                     VGKLRQERNAALEERNVLKEKLLESEKHRKOLIEELQNVKQEAKAVAEETRALRSRIHLA
                                                                                                                                                                                                                          301 VGKLRGERNAALEERNVLKEKLLESEKHRKQLIEELQNVKQEAKAVAEETRALRSRIHLA
                                                                                                                                                                                                                                                                                                       EAAQRQAHGMEMDYEEVIRLLEAEVSELKAQLADYSDQNKESVQDLRKRVTVLDCQLRKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     EMARKAFKASTERLIGFIEAIQEVILDSSAPLSTLSERRAVLASQTSLPLLARNGRSFPA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TLLLESKELVRSVRAILDMDCLPYGWEEAYTADGIKYFINHVTQTTSWIHPVMSALNLSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 95-98; 154pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mouse syntaxin 4 interacting protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAO15046 standard; Protein; 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AEBSEEDCPRELTDPKS 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AEESEEDCPRELTDPKS 557
```

```
RESULT 1
Q9WV89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QRIVZS home sapien
Q14265 home sapien
Q19658 caencrhabdi
097961 vulpes vulp
095q64 caencrhabdi
095q66 caencrhabdi
096398 schistosoma
Q21022 caencrhabdi
Q21622 caencrhabdi
Q21649 home sapien
Q81ew2 home sapien
Q81ew3 home sapien
Q81ew3 drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q9wv89 mus musculu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q8cfl1 mus musculu
                                                                                                                    9, 2003, 10:57:41; Search time 37.3649 Seconds (without alignments) 3819.179 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred, No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                              US-09-647-978A-5
2784
1 MNRXYTSTVVSPSLLEKDPAF......LSRSEENEEDCSRELFNQKS 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                             830525 segs, 258052604 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                               protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q9WV89
Q9WV89
Q8CF11
Q81425
Q14205
Q19658
Q95061
Q95066
P91146
Q95066
Q951022
Q21022
Q2102
Q2
                                                                                                                                                                                                                                                                                BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sp archea: *
sp bacteria: *
sp bungi: *
sp human: *
sp invertebrate: *
sp mammal: *
sp myc. *
sp organelle: *
sp phage: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sp_unclassified:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sp_rodent:*
sp_virus:*
sp_vertebrate:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sp_bacteriap:*
                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sp archeap:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rvirus:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sp plant:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SPIREMBL 23:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
Match Length
                                                                                                                      October
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27.4
4.72.4
8.4.7.6
8.6.6
8.6.6
9.6.6
                                                                                                                                                                                                 Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                183
182.5
182.5
181
180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
179.5
179.5
                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2109
1844
1184
187.5
185
185
                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                      Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Σ
```

```
044929 drosophila (99492) etrosophila (99491 stronglauce Q61595 mus musculu (81x28 homo sapien (99495 homo sapien (92456 schistosoma Q8Exy2 pyrococus Q8Exy2 pyrococus
                                                                                                                                                                    096nx7 homo sapien
01399 homo sapien
01399 homo sapien
014707 homo sapien
014707 homo sapien
015738 dictyosteli
076447 caenorhabdi
007649 caenorhabdi
00769 entamoeba h
086b21 mus musculu
099h12 mus musculu
099h21 homo sapien
099212 homo sapien
099212 homo sapien
099312 homo sapien
099312 homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=99322667: PubMed=10394363;

MEDLINE=99322667: PubMed=10394363;

MIN J. Okada S., Kanzaki M., Elmendorf J.S., Coker K.J., Ceresa B.P.,

Syn I.J., Noda Y., Saltiel A.R., Pessin J.E.;

Syn I.J., Noda Y., Saltiel A.R., Pessin J.E.;

"Synip: a novel insulin-regulated syntaxin 4-binding protein mediating

GLUT4 translocation in adipocytes.";

MOLT4 translocation in adipocytes.";

MOLT4 translocation in adipocytes.";

MOLT52244, AAA45533.1: -.

SMART; SMO0478; PDZ; 1.

ReferPro; IPR001478; PDZ;

InterPro; IPR001478; PDZ;

ReferPro; IPR001478; PDZ;

ReferPro; PR001202; WW Rsp5_WWP.

Refer; PF00595; PDZ; 1.

ROSITE; PS0106; PDZ; 1.

PROSITE; PS0106; PDZ; 1.

SMART; SMO0456; WW 1.

REFROSITE; PS01059; WW DOMAIN 1; 1.

RESQUENCE 557 AA, 61688 WW; 9211A8B02APBEC86 CRC64;
                                                                                                                              099284 mus musculu
Q962813 homo sapien
Q92340 rattus norv
Q96nx7 homo sapien
Q11399 homo sapien
Q13999 homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bukaryota, Metazoa, Chordata, Czaniata, Vertebrata, Buteleostomi, Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-NOV-1999 (TrEMBLrel. 12, Created)
01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
01-NOX-2003 (TrEMBLrel. 23, Last annotation update)
Syntaxin4-interacting protein synip.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75.8%; Score 2109; DB 11; 76.5%; Pred. No. 6.5e-107; ive 49; Mismatches 76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         557 AA
                                                                                                                                                                                                                                                                                                                                                                                                          ALIGNMENTS
  044929
09VJE5
09BV91
08BX29
08BX27
09BY57
09BY57
09BY57
09BY57
09BY58
002456
08TZW2
08CZ84
09CZ84
09CZ84
                                                                                                                                                                                                                                                                                        Q99NH2
Q9NCL3
Q8IX27
                                                                                                                                                                                                                                                             Q07569
Q8CB21
                                                                                                                                                                    096NX7
081UC7
013999
014707
08MSU5
                                                                                                                                                                                                                                                                                                                             Q9P0K7
Q9P2L2
Q9U9K8
Q9H2G7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT;
                                                                                                                                                                                                                                                  076447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 76.5
Matches 427; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRELIMINARY;
    16690
132000
132000
132000
132000
132000
122000
13200
13200
13300
13300
13300
13300
13300
13300
13300
13300
13300
13300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                    175.5
175.5
175.5
175.5
171.5
171.5
171.1
169.5
                                                                                                                                                                                                                                                                                        167.5
167.5
167.5
166.5
166.5
166.5
                                                                                                                                                                                                                                   168.5
168.5
                                                                                                                                                                                                                                                             168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q9WV89
```

us-09-647-978a-5.rspt

3

a

Ωp ò

```
295
                                                                                                                                                           355
                                                                                                                                                                                                                415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          78 MIGVSFEEAKSIITRAKL--RLESAWEIAFIRQKSDNIQPENLSCTSLIEASGEYGPQAS 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             136 TLSLFSSPPELLIPKTSSTPKTNNDILSSCEIKTGYNKTVQIPITSENSTVGLSNTDVAS 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09
                                                                                                                                                                         HOALROOVQADSKGTVSFGDFVQVARNLFCLQLDEVNVGAHEISNILDSQLLPCDSSEAD
                                                                                                                     240 REALREQVQADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEAD
                                                                                                                                                                                                                AEAAQRQAHGMEMDYEEVIRLLSAKITSLKAQLADYSDQNKESVQDLKKRIMVLDCQLRK
                                                                                                                                                                                                                                                                 SEMARKTFEASTEKLLHFVEAIQEVFSONSTPLSNISERRAVLASQTSLTPLGRNGRSIP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MIGVSFBEAKSIITGAKLSTRLESAWEIAFIRQKSDNIQPENLSCTSLIEASGEYGPQAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 TLSLFSSPPEILIPKTSSTPKTNNDILSSCEIKTGYNKTVQIPITSENSTVGLSNTDVAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   196 AWTENYGLOEKISLNPSVRFKAEKLEMALNYLGIOPTKEOHQALROOVQADSKGTVSFGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121 AWTENYGLQEKISLNPSVRFKAEKLEMALNYLGIQPTKEQHQALRQQVQADSKGTVSFGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FVQVARNLFCLQLDEVNVGAHEISNILDSQLLPCDSSBADEMERLKCERDDALKEVNTLK
TSLIEASGEYGPQASTLSLFSSPPEILIPKTSSTPKTNNDILSSC---EIKTGYNKTVQI
                                                                   EMERLKCERDDALKEVNTLKEKLLESDKQRKQLTEELQNVKQEAKAVVEETRALRSRIHL
                                                    PITS-ENSTVGLSNTDVASAWT-ENYGLQEKISLNPSVRFKAEKLEMALNYLGIQPTKEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                            QBIVZ5 PRELIMINARY; PRT; 245 AA.
QBIVZ5,
01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Similar to syntaxin binding protein 4.
Homo sapiens (Human).
Chordata, Craniata, Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     42.5%; Score 1184; DB 4; Length 98.8%; Pred. No. 4.4e-57; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Strausberg R.;
Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC041485; ARH41485.1; -.
SEQUENCE 245 AA; 26974 MW; 4E92DDBBFD27DF79 CRC64;
                                                                                                                                                                                                                                                                                                                                  1] Similarity 98.8
237; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
TISSUE=Eye;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=9606;
                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                         121
                                                    178
                                                                             180
                                                                                                       236
                                                                                                                                                           296
                                                                                                                                                                                                                356
                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                   416
                                                                                                                                                                                                                                                                                                                     476
                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   014205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Q14205
                                                                                                                                                                                                                                                                                         dC
                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                             ΩΩ
                                                                                                                                                                                  g
                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                     ò
                qq
                                                  ò
                                                                        g
                                                                                                     ò
                                                                                                                                                           à
                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                     539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DGRLKPGDQLVSVNKESMIGVSFEBAKSIITRAKLRLESAWEIAFIRQKSDNIQPENLSC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        415
                                                                                                                                                                                                                                                                                                                                 SEMARKTFEASTEKLLHFVEAIQEVFSDNSTPLSNLSERRAVLASGTSLTPLGRNGRSIP 475
                                                                                                                                                                                                                                                                                                                                                                                       ATLALESKELVKSVRALLDMDCLPYGWEEAYTADGIKYFINHVTQTTSWIHPVMSVLNLS 535
                                                                                                                    HQALRQQVQADSKGTVSFGDFVQVARNLFCLQLDEVNVGAHEISNILDSQLLPCDSSEAD 295
                                                                                                                                                                                                                                                                   EMERLKCERDDALKEVNTLKEKLLESDKQRKQLTBELQNVKQEAKAVVEETRALRSRIHL 355
                                                    DGRLKPGDQLVSVNKESMIGVSFEEAKSIITRAKLRLESAWEIAFIRQKSDNIQPENLSC 120
                                                                                                       TSLIEASGEYGPOASTLSLFSSPPBILIPKTSSTPKTNNDILSSC---EIKTGYNKTVQI 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
ATLLESKELVRSVRAILDMDCLPYGWEEAYTADGIKYFINHVTQTTSWIHPVMSALNLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MNKNTSTVVSPSLLEKDPAFQMITIAKETGLGLKVLGGINRNEGPLVYIQEIIPGGDCYK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PITS-ENSTVGLSNTDVASAWT-ENYGLQEKISLNPSVRFKAEKLEMALNYLGIQPTKEQ
                                                                   AEAAQRQAHGMEMDYEEVIRLLEAKITELKAQLADYSDQNKESVQDLKKRIMVLDCQLRK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66.4%; Score 1848; DB 11; Length 75.5%; Pred. No. 9.5e-93; Live 46; Mismatches 71; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Strausberg R.;
Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BC032881; AAH32881.1; -
SEQUENCE 533 AA; 58591 MW; 836BC19511E3AF09 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QGCFLI,
01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequer
01-MAR-2003 (TrEMBLrel. 23, Last annotes
Similar to syntaxin binding protein 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
STRAIN=C573L/6J; TISSUE=Thymus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S40 CAEESEEDCPRELTDPKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           al Similarity 75.5
379; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Н
                                                                                                       121
                                                                                                                                                                                     180
                                                                                                                                                                                                              236
                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                       416
                                                    61
                                                                            61
                                                                                                                                                                                                                                                                 596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OBCFL1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        È
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                           Ď.
                                                                                                                                                    ö
                                                                                                                                                                            CD
                                                                                                                                                                                                       95
25
                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                           Dp
                                                                                                                                                                                                                                                                                                                                                                                                                          õ
```

Ч

δ

```
Sequence 13, Appl
Sequence 13, Appl
Sequence 151, Appl
Sequence 151, Appl
Sequence 181, Appl
Sequence 181, Appl
Sequence 184, Appl
Sequence 1354, Appl
Sequence 1559, Appli
Sequence 11394, Appli
Sequence 11386, Appli
Sequence 11386, Appli
Sequence 11386, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91405,
91405,
91393,
91393,
91391,
91380,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91400,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91400,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 553;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Warner-Lambert Company
TITLE OF INVENTION: Gene Encoding Syntaxin Interacting Protein:
TITLE OF INVENTION: Gene Encoding Syntaxin Interacting Protein:
FILE REFERENCE: 09/647,0978A
CURRENT APPLICATION NUMBER: 05/09/647,978A
CURRENT FILING DATE: 1200-10-06
PRIOR FILING DATE: 1999-04-19
PRIOR FILING DATE: 1999-04-20
PRIOR FILING DATE: 1998-04-20
STORING PLIANG DATE: 1998-04-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
Query Match
100.0%; Score 2784; DB 20;
Best Local Similarity 100.0%; Pred. No. 4.3e-200;
Matches 553; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 5, Application US/09647978A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11020
118811
118811
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
11881
1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1
US-09-647-978A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-647-978A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1888.5
1888.5
1888.5
1888.5
1888.5
1888.5
1888.5
1888.5
1888.5
1888.5
1888.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   188.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             188.5
             Sequence 5, Appli
                                                                                                                                                                                                                          ; Search time 279.987 Seconds (without alignments) 1797.171 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                 2784
1 MNKATSTVVSPSLLEKDPAF.....LSRSEENEEDCSRELPNQKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pending Patents AA Main:*

1: (cgn2 6/ptodata/1/paa/USG6 COMB.pep:*

2: (cqn2 6/ptodata/1/paa/USG6 COMB.pep:*

3: (cgn2 6/ptodata/1/paa/USG7 COMB.pep:*

5: (cgn2 6/ptodata/1/paa/USG81 COMB.pep:*

6: (cgn2 6/ptodata/1/paa/USG81 COMB.pep:*

7: (cgn2 6/ptodata/1/paa/USG82 COMB.pep:*

8: (cgn2 6/ptodata/1/paa/USG82 COMB.pep:*

10: (cgn2 6/ptodata/1/paa/USG84 COMB.pep:*

11: (cgn2 6/ptodata/1/paa/USG84 COMB.pep:*

12: (cgn2 6/ptodata/1/paa/USG87 COMB.pep:*

13: (cgn2 6/ptodata/1/paa/USG87 COMB.pep:*

14: (cgn2 6/ptodata/1/paa/USG87 COMB.pep:*

15: (cgn2 6/ptodata/1/paa/USG87 COMB.pep:*

16: (cgn2 6/ptodata/1/paa/USG97 COMB.pep:*

17: (cgn2 6/ptodata/1/paa/USG98 COMB.pep:*

18: (cgn2 6/ptodata/1/paa/USG98 COMB.pep:*

19: (cgn2 6/ptodata/1/paa/USG98 COMB.pep:*

10: (
                                           GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 553 20 US-09-647-978A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5728757 segs, 939918778 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                 model
                                                                                                                                                                                                                             October 9, 2003, 10:59:20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gapop 10.0 , Gapext 0.5
                                                                                                                                                                    using sw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                   US-09-647-978A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query
Match Length DB
                                                                                                                                                                 protein search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sed
                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB s
Maximum DB s
                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                             Run on:
```

N

```
APPLICANT: DATACH, JOSEPH
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEM
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: PATEURIN VERSION 3.0
                                               180 PITSLDNSPADTSNADIAPAWTDDDSGFQGKISLNPSVRLKAEKLEMALNYLGIQPTKEQ 239
                                                                                                                                                                                                                                         SEMARKAFKASTERLIGFIEAIQEVLLDSSAPLSTLSERRAVLASQTSLPLLARNGRSFP 479
                                                                                                                                                                                                                                                                                                                                                                                                              ATLALESKELVKSVRALLDMDCLPYGWEEAYTADGIKYFINHVTQTTSWIHPVMSVLNLS 535
                                                                                                                                                                                                                                                                                                                                                                                                                              61 DGRLKPGDQLVSVNKESMIGVSFEEAKSIITRAKLRLESAWEIAFIRQKSDNIQPENLSC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 DGRLKPGDQLVSINKESMIGVSPEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 TSLIEASGEXGPQASTLSLFSSPPEILIPKTSSTPKTNNDILSSC---EIKTGYNKTVQI 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TSLIEASGEYGPQASTLSLFSSPPEILIPKTSSTPKTNNDILSSC---EIKTGYNKTVQI 177
                                                                                                                                                          236 HQALRQQVQADSKGTVSFGDFVQVARNLFCLQLDEVNVGAHEISNILDSQLLPCDSSEAD 295
                                                                                                                                                                                                                       EMERLKCERDDALKEVNTLKEKLLESDKQRKQLTEELQNVKQEAKAVVEETRALRSRIHL 355
                                                                                                                                                                                                                                                                                   356 AEAAQRQAHGMEMDYEEVIRLLEAKITELKAQLADYSDQNKESVQDLKGRIMVLDCQLRK 415
                                                                                                                                                                                                                                                                                                                                                 SEMARKTFRASTEKLIHFVEAIQEVFSDNSTPLSNLSERRAVLASQTSLTPLGRNGRSIP 475
DGRLKPGDQLVSINKESMIGVSFEEAKSIITRAKLRSESPWEIAFIRQKSYCGHPGNICC 120
                                                                                                                                                                         240 REALREQVQADSKGTVSFGDFVQVARSLFCLQLDEVNVGVHEIPSILDSQLLPCDSLEAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MNKNISTVVSPSLLEKDPAFQMITIAKETGLGLKVLGGINRNEGPLVYIQEIIPGGDCYK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      178 PITS-ENSTVGLSNTDVASAWT-ENYGLQEKISLNPSVRFKAEKLEMALNYLGIQPTKEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 75.8%; Score 2109; DB 22; Best Local Similarity 76.5%; Pred. No. 2.8e-149; Matches 427; Conservative 49; Mismatches 76;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-791-537-144266
; Sequence 144266, Application US/09791537
; GENERAL INFORMATION:
; APPLICANT: Bionomix, Inc.
; APPLICANT: Debe, Derek
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          536 RSEENEEDCSRELPNOKS 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             :||:|||| ||| : ||
540 CAEESEEDCPRELTDPKS 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Mus musculus
US-09-791-537-144266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 144266
                                                                                                                                                                                                                       296
                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                 416
                                                                                                                                                                                                                                                                                                                                                                               420
 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         È
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
 6 B
                                                    g
                                                                                ò
                                                                                                                qq
                                                                                                                                                ò
                                                                                                                                                                                Dp
                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                            ď
                                                                                                                                                                                                                                                                           ठे
                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                              È
                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DGRLKPGDQLVSVNKESMIGVSFBEAKSIITRAKGRLESAWEIAFIRQKSDNIQPENLSC 120
                                                                         180
                                                                                                                                                                       180
                                                                                                                                                                                                       240
                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                  QOVQADSKGTVSFGDFVQVARNLFCLQLDEVNVGAHEISNILDSQLLPCDSSEADEMERL 300
                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                        KTFEASTEKLLHFVEALOEVFSDNSTPLSNLSERRAVLASGTSLTPLGRNGRSIPALAL 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MNKNISTVVSPSLLEKDPAFQMITIAKBIGLGLKVLGGINRNEGPLVYIQEIIPGGDCYK 60
                                               9
                                                                                                                                                          TSLIEASGEYGPQASTLSLESSPPELLIPKTSSTPKTNNDILSSCEIKTGYNKTVQIPIT
                                                                                                                                                                                                                                                                                     241 QQVQADSKGTVSFGDFVQVARNLFCLQLDEVNVGAHEISNILDSQLLPCDSSEADEMERL
               181 SENSTVGLSNTDVASAWTENYGLOEKISLNPSVRFKAEKLEMALNYLGIOPTKEQHQALR
                                                                                                                                                                                                                       KCERDDALKEVNTLKEKLLESDKORKOLTEELONVKOEAKAVVEETRALRSRIHLAEAAO
                                                                                                                                                                                                                                                                                                                                                                                              ROAHGMEMDYEEVIRLLEAKITELKAQLADYSDQNKESVQDLKKRIMVLDCQLRKSEMAR
                                                                                                                                                                                                                                                                                                                                                                                                               KTFEASTEKLLHFVEAIQEVFSDNSTPLSNLSERRAVLASQTSLTPLGRNGRSIPATLAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ESKELVKSVRALLDMDCLPYGWEEAYTADGIKYFINHVTQTTSWIHPVMSVLNLSRSEEN
                                                                                                                                        TSLIEASGEYGPQASTLSLFSSPPEILIPKTSSTPKTNNDILSSCEIKTGYNKTVQIPIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Warner-Lambert Company
TITLE OF INVENTION: Gene Encoding Syntaxin Interacting Protein
FILE REFERENCE: 09/647,978
CURRENT APPLICATION NUMBER: US/09/647,978A
CURRENT AILING DATE: 2000-10-06
PRIOR APPLICATION NUMBER: PCT/US99/08568
PRIOR PLING DATE: 1999-04-19
PRIOR FILING DATE: 1999-04-20
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
LENGTH: 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                75.8%; Score 2109; DB 20; Length 376.5%; Pred. No. 2.8e-149; iive 49; Mismatches 76; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Sequence 2, Application US/09647978A; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EEDCSRELPNOKS 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541 EEDCSRELPNOKS 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 76.5'
Matches 427; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 2
US-09-647-978A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-647-978A-2
                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                             61
                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                      QQ
                                                                                                                                                               d
d
                                                                                                                                                                                                  ò
                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                               ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                         ò
                                                                                                                                      ò
```

us-09-647-978a-5.rapb

Sequence 73, Sequence 90, Sequence 92,

Sequence 6, Appli Sequence 1, Appli Sequence 3, Appli Sequence 2, Appli Sequence 8, Appli Sequence 8, Appli Sequence 13, Appli Sequence 13, Appli Sequence 15, Appli Sequence 15, Appli Sequence 16, Appli Sequence 22, Appli Sequence 24, Appli Sequence 27, Appli Sequence 16, Appli

```
LOCATION: (149)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               79 IGVSFBEAKSIITRAKLRLESAWEIAFIRQKSDNIQPENLSCTSLIEASGEYGPQASTLS 138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 139 LFSSPPEILIPKTSSTPKTNNDILSSCEIKTGYNKTVQIPITSENSTVGLSNTDVASAWT 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 LFSSPPEILIPKTSSTPKTNNDILSSCEIKTGYNKTVQIPITSENSTVGLSNTDVASAWT 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 IGVSFEEAKSIITRAKLRLESAWEIAFIRQKSDNIQPENLSCTSLIEASGEYGPQASTLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3931, Application US/09764891
Fublication No. US20030077808A1
GENERAL INFORMATION:
TITLE OF INVENTION:
TITLE OF INVENTION:
CURRENT APPLICATION NUMBER: US/09/764,891
CURRENT FILIO DATE: 2001-01-17
Prior application data removed - consult PALM or file wrapper: SOFTWARE: Patentin Ver. 2.0
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 3931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26.7%; Score 744; DB 11; Length 150; 100.0%; Pred. No. 3.3e-47; ive 0; Mismatches 0; Indels
US-09-893-519A-73
US-10-197-666A-90
US-10-197-666A-92
US-09-727-384-6
US-10-023-219-4
US-10-023-219-4
US-10-142-96
US-10-142-96
US-10-171-311-8
US-10-171-311-6
US-10-171-311-6
US-09-951-401-3
US-09-951-401-3
US-09-951-401-3
US-09-951-401-3
US-09-951-401-3
US-09-951-401-3
US-09-951-401-3
US-09-971-161A-219
US-09-771-161A-219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  199 ENYGLQEKISLNPSVRFKAEKLEMALNY 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENYGLOEKI SLNPSVRFKAEKLEMALNY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 148; Conservative
        TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: SITE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; OTHER INFORMAT
US-09-764-891-3931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-764-891-3931
                                                                     1553.5
1553.5
1553.5
150.5
150.0
1449.5
1499.5
1499.5
1499.5
1499.5
                                                                                                                                                                                                                                                                                                                                                              149
149
148.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  148
147
146.5
146
146
146
146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 7646, Apple Sequence 2, Appli Sequence 16, Appli Sequence 62, Appli Sequence 62, Appl Sequence 624, Appl Sequence 260, Appl Sequence 260, Appl Sequence 29, Appl Sequence 29, Appl Sequence 169, Appl Sequence 7611, Appl Sequence 8611, Appl Sequence 
                                                                                                                                                     October 9, 2003, 10:59:50 ; Search time 45.336 Seconds (without alignments) 1965.413 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                     US-09-647-978A-5
2784
1 MNKNTSTVVSPSLLEKDPAF......LSRSEENEEDCSRELPNOKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Published Applications AA:*

1: /cgn2_6/ptodara/1/pubpaa/PCT NEW PUB.COMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/USO6_NEW PUB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/USO6_NEW PUB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/USO6_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/USO6_PUBCOMB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
9: /cgn2_6/ptodata/1/pubpaa/USO8_PUBCOMB.pep:*
10: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
11: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
12: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
13: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
14: /cgn2_6/ptodata/1/pubpaa/USO9_PUBCOMB.pep:*
15: /cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
17: /cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
17: /cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
18: /cgn2_6/ptodata/1/pubpaa/USO0_PUBCOMB.pep:*
                               GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 US-09-764-891-3931

2 US-10-032-585-7646

0 US-09-757-781-2

0 US-09-757-781-1

US-09-757-781-62

0 US-09-757-781-62

0 US-09-802-669-46

0 US-09-817-14-13240

2 US-10-128-714-13240

2 US-10-128-714-382

0 US-09-19-172-29

2 US-10-146-473-82

0 US-09-919-172-29

2 US-10-128-714-8220

2 US-10-128-714-8220

2 US-10-032-585-7611
                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                    600653 segs, 161128416 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fost-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries
                                                                                                                 using sw model
                                                                                                                                                                                                                                                                                                                                          Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            150
1356
1356
2485
11337
11001
1743
2383
2383
2188
2128
2128
2178
2178
2178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                 protein search,
                                                                                                                                                                                                                                                                                                                        BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            744
190.5
180
175.5
169.5
169.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             167
161
158.5
158
158
158
                                                                                                                                                                                                                                        Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                    ï
                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                      Searched:
                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Run on:
```

60

Gaps

0;

```
LENGTH: 1356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
US-09-757-781-1
                                                                                                                                                                                                                                                                                                                                         US-09-757-781-2
                                                                                                                                                                                                                                                                                     FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G
D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        260 EQLOVVNDKCKELEACLKKLTETKEKEINDLIRKLEAAKSDHDTERKKLSL-----LI 1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1313 EDŤKŠESEKNVIKLNEQIEKLKGEREKEVRĎIQSQLAAKŤTDWEKIKŤTLDKVLKEKSDL 1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1373 EKTNKESVÖTLKKEVEN--LKKEISLLEDQKKDDTTKYKELAAQLETKTSNLDSTTMELE 1430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       431 KTELELKKVRNELTEATSELTKLQDNNQSLTEEIEKTKAALTKSSKDLEVCGN----QKS 1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1203 NNKLKTQEBKIS-DLETSVAISEDKSKSLKHDIEDLKREKIKLETTLKENEETMF--EKK 1259
                                                                  APPLICANT: Terry, Roemer D.
APPLICANT: Terry, Roemer D.
APPLICANT: Charles, Boone
APPLICANT: Charles, Boone
APPLICANT: Charles, Boone
APPLICANT: Howard, Bussey
TITLE OF INVENTION: Gene Disruption Methodologies for Drug Target Discovery
FILE REPRENCE: 10182-005-999
CURRENT REPLICATION NUMBER: US/10/032,585
CURRENT FILING DATE: 2001-12-20
NUMBER OF SEQ ID NOS: 8000
SOFTWARE: PatentIn version 3.1
SEQ ID NO 7646
LENGTH: 1881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         187 GLSN---TDVASAWTENYGLQEKISL-----NPSVRFK------AE 218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 DGRLKPGDQLVSVNKESMIGVSFEEAKSI-----ITRAKLRLESAW----EIAFIRQKS 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ...---IEAS-GEYGPQASTLSLFSSPPEILI 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              149 PKTSSTPKTN--------NDILSSCEIKT---GYNKTVQIPITSENSTV 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EVNVGAHEISNILDSQLLPCDSSEADEMERLKCERDDALKEVNT----LKEKLLESDKQR 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             326 KQLTEELQNVKQEAKAVVEETRALRSRIHLA-------356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  414 RKSEMARKTFE---ASTE-KLLHFVEAIQEVFSDNST---PLSNLSERRAVLASQTSLTP 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KLEMALNYLGIQPT-----KEQHQALRQQVQADSKGTVSFGDFVQVARNLFCLQLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EAAORQAHGMEMDYEEVIRLLEAKITELKAQLADYSDQNK---ESVQDLKKRIMVLDCQL
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 6.8%; Score 190.5; DB 12; Length 1881; Best Local Similarity 21.2%; Pred. No. 6.7e-05; Matches 120; Conservative 100; Mismatches 183; Indels 163; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1718 VKNSGLSTTSELA----ALTKTVKSL 1739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            467 LGRNGRSIPATLALESKELVKSVRAL 492
US-10-032-585-7646
Sequence 7646, Application US/10032585
Publication No. US20030180953A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: MISC_FEATURE
JOCATION: (1881). (1881)
CTHER INFORMATION: X=any amino acid
US-20-032-585-7646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNIQPENLSCTSL------
                                                                                                                                                                                                                                                                                                                       ORGANISM: Candida albicans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Эb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

RESULT 3

```
642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 :|:| || : :: : ||: : : : : || | : : : || | : | : | | | : | | : | | | | : | | : | | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | : | | : | : | | : | | : | | : | | : | | : | | : | | : | | : | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | | : | : | | : | : | | : | : | | : | : | | : | : | | : | : | | : | : | : | | : | : | | : | : | | : | : | : | | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      58 CYKJGRLKPGDQLVSVNKESMIGVSFEEAKSIITRAKLRLESAWEIAFIRGKSDNIQPEN 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        118 LSCTSLIEASGEYGPOASTLSLFSSPPEILIPKTSS-----TPKTNNDILSSCEIKT 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         222 MALN---YLGIOPTKEQHQALRQOV--QADSKGTVSFGDFVQVARNLF-CLGLDE---- 270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                271 -----VNVGAHEISNILDSQLLPCDSSEADEMERLKCERDDALKEVNTLKEKLLES 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        698 GPELPIETALDDRERRISHSLYSGIEGLDESPS-----RNAALSRI-----MGES 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     382 TELKAQLADYSDQNKESVQDLKKRIMVLDCQL----RKSEMARKTFEASTEKLLHFVEAI 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      499 AIODGRLKAGDRLIEVNGVDLVGKSQEEVVSLLRSTK--MEGTVSLLVFRQE-DAFHPRE 555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           556 LN------ SEPSOMCIPKETKAEDEDIVLTPDGTREFL----- 587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          322 DKQRKQLTEELQNVKQEAKAVVEETRALRSRIHLAEAAQRQAHGMEMDYEEVIRLLEAKI 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            794 TWAKAAISDSADCSLSPDVD-----PVLAFQREGFGRQSMSEKRTKQFSDASQLDFVKTR 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             438 QEVFSD----NSTPLSNLSERRAVLASQTSLTPLGRNGRSIPATLALESKELVKSVR 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 849 KSKSMDLGIADETKINTVDDQKA------GSPSRDVGPSLGLKKSSSLESLQ 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6 STVVSPSLLEXDPAFQM-ITIAKET-GLGLKV-----LGGINRNEGPLVYIQEIIPGGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   170 GYNKTVQIPITSENSTVGLSNTDVASAWTENY --- GLQEKISINPSVRFKAEKLE ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 6.5%; Score 180; DB 10; Length 1356; Best Local Similarity 21.6%; Pred. No. 0.00024; Matches 116; Conservative 97; Mismatches 186; Indels 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. US20020137166A: 2582063CD1
Sequence 2, Application US/09757781
Patent No. US20020137166A1
GENERARI INFORMATION:
APPLICANT: Reddy, Roopa
APPLICANT: Tang, Y. Tom
APPLICANT: Krasnow, Randi E.
TITLE OF INVENTION: ASIP-RELATED PROTEINS
FILE REFERENCE: PC-0032 US
CURRENT APPLICATION NUMBER: US/09/757,781
CURRENT FILING DATE: 2001-01-09
NUMBER OF SEQ ID NOS: 63
SEQ ID NO 2.
SEQ ID NO 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1, Application US/09757781
Patent No. US2002013166A1
GENERAL INFORMATION:
APPLICANT: Reddy, Roopa
APPLICANT: Tang, Y. Tom
APPLICANT: Baughn, Mariah R.
APPLICANT: Kasenow, Randi E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Reddy, Roopa
Tang, Y. Tom
Baughn, Mariah R.
Krasnow, Randi E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo sapiens
```

31, Appl 4, Appli 4, Appli 12, Appli 12, Appl 3944, Ap 1696, A 4, Appli 4, Appli 4, Appli

```
Sequence
Sequence
Sequence
                                                                                                                                                                                                     Sequence
                                                                                                                                                                           Sequence
Sequence
                                        Sequence
                                                      Sequence
                                                                  Sequence
                                                                              Sequence
                                                                                             Sequence
                                                                                                                                                                Sequence
                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: YEN, TIMOTHY J.

APPLICANT: RATTNER, JEROME B.

TITLE OF INVENTION: NUCLEIC ACID ENCODING A
TITLE OF INVENTION: TRANSIENTLY-EXPRESSED KINETOCHORE PROTEIN,
TITLE OF INVENTION: AND METHODS OF USE
CORRESPONDENCE ADDRESS:
ADDRESSEE: DANN, DORFMAN, HERRELL AND SKILLMAN
              Sequence
                           Sequence
                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels 118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 6.7%; Score 186; DB 1; Length 3248; Best Local Similarity 21.6%; Pred. No. 3.9e-06; Matches 104; Conservative 80; Mismatches 180; Indels 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CIALL: FIRE COUNTRY: USA

ZIP: 19103-2207

COUNTRY: USA

ZIP: 19103-2207

COMPUTER FEDABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IRM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PARENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/33,700
FILING DATE: 09-DEC-1994
CLASSIFICATION: 435
ATORNEY/AGENT INFORMATION:
NAME: REED, JANET E.
REGISTRATION NUMBER: 36,252
TELEPAX: (215) 563-4104
INFORMATION FOR SED, DO: 1:
SEQUENCE CHARACTERISTICS:
FENTAL 1258
FENTAL 1000
FELEPAX: (215) 563-4044
INFORMATION FOR SED, DO: 1:
SEQUENCE CHARACTERISTICS:
FENTAL 1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEE: DANN, DORFMAN, HERRELL AND SKILLMAN: 1601 MARKET STREET, SUITE 720 PHILADELPHIA
                                                                                                                                                                          US-09-107-532A-3944
US-09-252-991A-16965
US-08-951-912-4
US-09-174-077-4
                                                                           PCT US93 -03077 1

US-09-59-5-684B 31

US-08-09-7-714-4

US-08-480-145-4

US-08-77-189-4

US-08-96-751-4

US-09-914-259-12
                                     US-09-306-998-3
US-09-562-737-22
US-09-562-737-21
             US-08-973-462-8
US-09-914-259-11
                                                                                                                                                                                                                                US-08-466-390-4
                                                                                                                                                                                                                                                                       ALIGNMENTS
                                                                                                                                                                                                                                                                                                                         US-08-353-700-1
Sequence 1, Application US/08353700
Patent No. 559919
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein
NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: siz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: HUMAN
 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CRIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
CITY: PH
150
150
149.5
149.5
148.5
148.5
148.5
148.5
146.5
146.5
 Appl.
29927, A
2, Appli
', Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Appli
Sequence 4, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 9, Appli
Sequence 10, Appli
Sequence 12, Appli
Sequence 12, Appli
Sequence 12, Appli
Sequence 12, Appli
Sequence 2, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Appli
Appli
Appli
Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Appli
Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4789, Ap
Sequence 5080, Ap
Sequence 6, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Appl
Appl
                                                                                         ; Search time 14.9459 Seconds (without alignments) 1565.502 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 48, 1
Sequence 48, 1
Sequence 2, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2
Sequence 2
Sequence 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2
Sequence 2
Sequence 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                          1 MNKNTSTVVSPSLLEKDPAF.....LSRSEENEEDCSRELPNQKS
                                                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
             GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-08-353-700-1
US-08-353-700-1
US-08-39-15616-1
US-08-290-640-46
US-09-290-640-3
US-09-100-600-3
US-09-1010-601-3
US-09-1010-501-8-1
US-09-101-501-10
US-09-101-501-10
US-09-101-501-10
US-09-101-3248-4
US-09-157-191-2
US-09-572-191-2
US-09-572-191-2
US-09-572-191-2
US-09-572-191-2
US-09-572-191-2
US-09-572-191-2
US-09-773-282-2
US-09-773-292-2
US-09-773-820-2
US-09-783-820-2
US-09-783-820-2
US-09-783-820-2
US-09-783-820-2
US-09-783-820-2
US-09-173-820-2
US-09-541-782-6
                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                             328717 seqs, 42310858 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                        Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                  - protein search, using sw model
                                                                                           October 9, 2003, 10:57:41
                                                                                                                                                                                                    BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                Issued Patents AA:*
                                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 200000000
                                                                                                                                                 US-09-647-978A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1388
1388
11388
11612
11184
11184
11129
896
896
896
896
1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2465
2465
2465
2008
3433
976
2466
1829
                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                186
185.5
175.5
170.5
170.5
168
167
167
167
167
167
1159.5
1159.5
1159.5
1159.5
1159.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            155
155
154.5
152
152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                                                                                             Perfect score:
                                                                                                                                                                                                                                                                                                  Minimum DB
Maximum DB
                                                                   OM protein
                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                             .
.
.
```

19;

Gaps

19;

174

Fr.

```
2027 EKICLEKDNENKOKVIVCLEEELSVVTSERNÖ-LRGELDTMSKKTTALDGLSEKKKEKTQ 2085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2226 ADBKKQLHIABKLKERERENDSLKDKVENLERELQMSBENQELVILJAENSKAEVETLKT 2285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2086 ELESHQSECLHCIQVAEAEVKE-----KTELLQTLSSDVSEL-----LKDKTH 2128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -----LFCLQLDEVNVGAHEISNILDSQLLPCDSSEADEMERLKCERDDALKEVNT 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LKEKL--LESDKORKOLTE-ELON----VKQEAKAVVEETRALRSRIHLAEAAOROAHGM 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMDYEE -- VIRLIEBAKITELKAQLADYSDONKESVQDJKKRIMVJDCQLRKSEMARKTPE 424
                                                                                                                                                                                                                                                                                                                                                                                     ----KSSREDIGDNVAKVNDSWKERFLOVENELSRIRSEKASIEHEALYLEADLEVVQT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2129 LOBKLOSLEKDSOALSLIKCELENOIAOLNKEKELLVKESESLOARL-----S
                                                                                                                                                                                                                                                                119 SCISLIEASGEYGPQASTLS ---- LFSSPPEILIPKTSSTPKTNNDILSSCEIKTGYNKT
                                                                                                                                                                                                                                                                                           175 VQIPITSENSTVGLSNTDVASAWTENY-----GLOEKISLNPSVRFKAEKLEMALNYLGI
                                                                                                                                                                                                                                                                                                                                                                                                                              ----TKEQHQALRQQVQADSKGTVSFGDFVQVARN---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2177 ESDYEKLNVSKALEAALVE-KGEFALRLSSTQEEVHQLRRGI------EKLRVRIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          425 ASTEKLLHFVEAIQEVFSDNST---PLSNLSERRAVLASQTSLTPL-GRNGRSIPATLAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ESKELVKSVRALLDMDCLPYGWEEAYTADGIKYFINHVTQTTSWIHPVMSVLNLSRSEEN
                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/08328254
Patent No. 5710022
GENERAL INFORMAT: A. Valiang
APPLICANT: Zhu, Xueliang
APPLICANT: Lee, Wen-Hwa
TITLE OF INVENTION: A No. 5710022el Nuclear Mitotic Phosphoprotein
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                         Indels 118;
                                                                                                                                                                               Length 3248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRAT APPLICATION DATA:
APPLICATION NUMBER: US/08/328,254
                                                                                                                                                                                                                    80; Mismatches 180;
                                                                                                                                                                                 6.7%; Score 186; DB 5;
21.6%; Pred. No. 3.9e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE: Campbell and Flores
STREET: 4370 La Jolla Village Drive,
                 TYPE: amino acid
STRANDEDNESS: not relevant
TOPOLOGY: not relevant
MOJECULE TYPE: protein
3248 amino acids
                                                                                                                                                                                                 Best Local Similarity 21.63
Matches 104; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 92122
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy of
                                                                                                                                                                                                                                                                                                                                                                                                                                230 QP-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: San Diego
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EQ 2341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EE 542
                                                                                              HYPOTHETICAL:
                                                                                                                    ANTI-SENSE:
PCT-US95-16216-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 3
US-08-328-254-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
LENGTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                       1972
                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                              Ġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΩÇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2226 ADEKKOLHIAEKLKERERENDSLKDKVENLERELOMSEENQELVILDAENSKAEVETLKT 2285
                                       1920 ACIELEKIVGELKKENSDLSEKLEYFSCDHQELLQRVETSEGLNSDLEMHAD----- 1971
                                                                                                                      -----KSSREDIGDNVAKVNDSWKERFLDVENELSRIRSEKASIEHEALYLEADLEVVQT 2026
                                                                                                                                                                                        2086 ELESHQSECLHCIOVAEAEVKE-----KTELLQTLSSDVSEL-----LKDKTH 2128
                                                                                                                                                                                                                                                                                                                                                                                                                                                ESDYEKLNVSKALBAALVE-KGEFALRLSSTQEEVHQLRRGI------EKLRVRIE 2225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481 ESKELVKSVRALLDMDCLPYGWEEAYTADGIKYFINHVTQTTSWIHPVMSVLNLSRSEEN 540
                                                                                                                                                                                                                                               314 LKEKL.--LESDKQRKQLTE-ELQN----VKQEAKAVVEETRALRSRIHLAEAAQRQAHGM 366
                                                                                                                                                                                                                                                                                                                                                                                                             EMDYEE--VIRLLEAKITELKAQLADYSDQNKESVQDLKKRIMVLDCQLRKSEMARKTFF 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ASTEKLLHFVEAIQEVFSDNST---PLSNLSERRAVLASQTSLTPL-GRNGRSIPATLAL 480
SCTSLIEASGEYGPQASTLS----LFSSPPEILIPKTSSTPKTNNDILSSCEIKTGYNKT 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Yen, Timothy J.
APPLICANT: Rattner, Jerome B.
TITLE OF INVENTION: Nucleic Acid Encoding a Transiently
TITLE OF INVENTION: Expressed Kinetochore Protein, and Methods of Use
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSE: Dann, Dorfman, Herrell and Skillman
STREET: 1601 Market Street Suite 720
                                                                                                                                                                230 QP------TKEQHQALRQQVQADSKGTVSFGDFVQVARN---
                                                                                                                                                                                                                                                                                                                                                                   LOBKLOSLEKDSOALSLTKCELENOIAOLNKEKELLVKESESLOARL-----S
                                                                                 175 VQIPITSENSTVGLSNTDVASAWTENY-----GLQEKISLNPSVRPKAEKLEMALNYLGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/16216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
APPLICATION NUMBER:
FILING DATE: 09-DEC-1995
ATTORNEY/AGENT INFORMATION:
NAME: Reed, Janet E.
REGISTRATION NUMBER: 36,252
TELECOMMUNICATION INFORMATION:
TELEPHONE: (215) 563-4100
TELEPHONE: (215) 563-4044
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 2
PCT-US95-16216-1
PCT-US95-16216-1
Sequence 1, Application PC/TUS9516216
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ZUP: 19103-2307
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Philadelphia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u> 50</u> 2341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EE 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: 1
                                                                                                                                                                                                                                                                                                                                                                                                             367
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2177
119
                                                                                                                      1972
                                                                                                                                                                                                                                                                                                                                                                   2129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                               263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          425
                                                                                                             CC
                                                                                                                                                              ð
                                                                                                                                                                                          g
                                                                                                                                                                                                                                  È
                                                                                                                                                                                                                                                                                ΩD
                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                           DD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                 ઠે
```

Human polypeptide Human MDDT-22 prot Human MDDT-2 prote Sequence encoded b

195 190.5 188.5 187.5 187.5 187.5

Human ASIP-related Drosophila melanog Drosophila melanog

AAW63043
ABP73809
ABP73809
ABP73809
ABP685933
AAP55393
AAAP50373
AAAW23996
AAW23996
AAW23996
AAW2399746
AAW80349
AAW803597
AAW80359746
AAW80350746
AAW8035074

186 185.5 185.5 185.5 185.5 175.5 175.7 175.7 166 169.5 167.

Human mitosin amin Protein differenti

Kinetochore protei Human mitosin. Ho

Streptococcus uber Candida albicans e

н

Mouse ischamical Mouse ischamic co Human ASIP-related Amino acid sequenc An F-actin-combine A rod shortened dy Rapergillus fumiga Utrophin truncated Amino acid sequenc Utrophin. Homo sa H. pylori GHPO 175 Human SCP-1 mutein Human SCP-1 mutein Human protein tyro

Human PTPL1 phosph Angiogenesis-assoc

Intracellular prot

structural a Human protein sequ Amino acid sequenc

AAE33672 AAB95798 AAG67610

ξ

```
AA015047
9, 2003, 10:57:36 ; Search time 40.3541 Seconds (without alignments) 2175.142 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A_Geneseq_19Jun03:*

| SIDDSI/gcgdata/geneseqp_embl/AA1980.DAT:*
| SIDDSI/gcgdata/geneseqp_embl/AA1981.DAT:*
| SIDDSI/gcgdata/geneseq/geneseqp_embl/AA1981.DAT:*
| SIDDSI/gcgdata/geneseq/geneseqp_embl/AA1981.DAT:*
| SIDDSI/gcgdata/geneseq/geneseqp_embl/AA1981.DAT:*
| SIDDSI/gcgdata/geneseq/geneseqp_embl/AA1981.DAT:*
| SIDDSI/gcgdata/geneseq/geneseqp_embl/AA1981.DAT:*
| SIDDSI/gcgdata/geneseq/geneseqp_embl/AA1981.DAT:*
| SIDDSI/gcgdata/geneseq/geneseqp_embl/AA1991.DAT:*
| SIDDSI/gcgdata/geneseq/geneseqp_embl/AA1991.DAT:*
| SIDDSI/gcgdata/geneseq/geneseqp_embl/AA1991.DAT:*
| SIDDSI/gcgdata/geneseq/geneseqp_embl/AA1991.DAT:*
| SIDSI/gcgdata/geneseq/geneseqp_embl/AA1991.DAT:*
| SIDSI/gcgdata/geneseqf/geneseqp_embl/AA1991.DAT:*
| SIDSI/gcgdata/geneseqf/geneseqp_embl/AA1991.DAT:*
| SIDSI/gcgdata/geneseqf/geneseqp_embl/AA2001.DAT:*
| SIDSI/gcgdata/geneseqf/geneseqp_embl/AA2001.DAT:*
| SIDSI/gcgdata/geneseqf/geneseqp_embl/AA2003.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /AA1989.DAT:*/AA1990.DAT:*/AA1991.DAT:*
                                                                                                                                                                                                US-09-647-978A-5
2784
1 MNRATSTVVSPSLLEKDPAF.....LSRSEENEEDCSRELPNQKS
                GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. is the number of results predicted by score greater than or equal to the score of the and is derived by analysis of the total score di
                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                    1107863 seqs, 158726573 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries
                                                                                     protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAO15047
AAY52446
AAO15046
ABG66753
ABB95970
AAM95273
                                                                                                                                                                                                                                                                                             Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                         Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3555533553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    %
Query
Match Length D
                                                                                                                           October
                                                                                                                                                                                                                                                                             BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91.6
75.8
75.8
31.1
26.7
26.7
11.2
                                                                                                                                                                                                  Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2109
2109
866
744
744
313
310
                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score
                                                                                         protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database
                                                                                                                           Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             426459500
```

	<	
.emb1/AA2001.DAT:*	₹.	Human; antisense dene therapy; Syntaxin 4 interacting protein;
-emb1/AA2002.DAT:*	Æ.	antisense oligonucleotide, diabetes, obesity, skeletal muscle disorder,
-emb1/AA2003.DAT:*	%X	inflammation; tumour formation.
	×	
/ chance to have a	so	Homo sapiens.
<pre>s result being printed,</pre>	×	
distribution.	- Kd	W0200224864-A2.
	×	
	Od.	28-MAR-2002.
	XX	
	P.F.	19-SEP-2001; 2001WO-US29251.
Description.	×	
	PR	22~SEP-2000; 2000US-0668313.
Human syntaxin 4 i	×.	
Murine syntaxin-4	PA	(ISIS-) ISIS PHARM INC.
Mouse syntaxin 4 i	×	
Human novel polype	Id	Monia BP, Freier SM, Wyatt JR;
Human testicular a	×	
Human reproductive	K	WPI; 2002-401986/43.
Novel human diagno	S.	N-PSDB; ABQ62261.
Novel human diagno	×	
Human syntaxin 4 i	PT.	Novel ancisense compound that hybridizes and inhibits nucleic acid

Human syntaxin 4 interacting protein 2.

16-AUG-2002

AA015047;

AAO15047 standard; Protein; 554 AA.

ABG12284 ABG03416 AA015045

```
This sequence represents murine syntaxin-4 interacting protein (SYNIP), which is a novel insulin-regulated SNARE-like protein directly involved in the regulation of glucose transporter and GLUT4 glucose transporter vesicle translocation. Insulin induces translocation of GLUT4 from the intracellular low density microsomal compartment to the Cell's urface, GLUT4 translocation playing an important role in the uptake of glucose contains and compartment to the Cell's urface, by cells. Insulin-stimulated glucose transport and GLUT4 translocation require specific interactions between the vesicle membrane SNARE (Soluble Nethylmaleidide-sensitive factor attachment protein receptor), WAMP2, and the target membrane SNARE, syntaxin-4. SYNIPs competitively bind to syntaxin-4, preventing the ligand from interacting which text compute intracellular receptor, and are only expressed in cells which exhibit insulin-responsive glucose transport and GLUT4 translocation.

CC finsulin induces a dissociation of the SYNIPsyntaxin-4 complex via a decrease in the binding affinity of SYNIP for syntaxin-4. Binding of the SYNIP Cterminal domain is in contrast refractive to insulin stimulation. But inhibite splucose transport and GLUT4 translocation. SYNIP proteins and nucleotides may be used in translocation or abnormal glucose storage characterised by abnormal GLUT4 translocation or abnormal glucose storage express SYNIP proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           express SYMIP proteins, in gene therapy, or as a source of diagnostic probes and primers. SYNIP proteins may be used to identify antagonists which will prevent the binding of SYNIP to syntaxin-4, thereby increasing glucose transport, or agonists, which will act to decrease glucose transport. The diseases that may be treated include diabetes transport. The diseases that may be treated include diabetes ovarian syndrome, hypertension, atherosclerosis and other diseases associated with insulin resistance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Note: SYNIP cDNAs (mouse and human), and an additional SYNIP protein are
                 vesicle translocation; insulin; regulation; SNARE; SNARE-like; soluble N-ethylmataladide-sensitive factor attachment protein receptor; uptake; syntaxin-4; VAMPE; competition; binding; glucose storage; glucose utilisation; recombinant expression; gene therapy; diagnostic; antagonist; agonist; diabetes; glycogen storage disease; obesity; type II; polycystic ovarian syndrome; hypertension; atherosclerosis; insulin resistance; antidiabetic; anorectic; hypotensive;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel polypeptides and polynucleotides used for diagnosis of syndrome
involving abnormal levels of glucose or abnormal GLUT4 translocation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 also claimed, but the sequences are not given in the specification.
transport; GLUT4;
                                                                                                                                                                                                                                                                                                                  /note= "Calcium-binding EF-hand domain"
                                                                                                                                                                                                                                                                                                                                                           /note= "Tandem coiled coil domains"
500..533
  interacting protein; SYNIP; glucose;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Syn
                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                            /note= "PDZ domain"
                                                                                                                                                                                                                                                                                                                                                                                                  "WW domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Saltiel AR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 6; Fig 1A; Slpp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US08568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (WARN ) WARNER LAMBERT CO. (IOWA ) UNIV IOWA RES FOUND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0082454
                                                                                                                                                                                                                                                                                                                                      300..410
                                                                                                                                                                                                                                                                                                   . 264
                                                                                                                                                                                                                                                                                                                                                                                                      /note=
                                                                                                                                                            antiarteriosclerotic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-038498/03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Min J, Pessin JE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                          W09954465-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-OCT-1999
                                                                                                                                                                                                     Mus sp
                                                                                                                                                                                                                                                             Domain
                                                                                                                                                                                                                                                                                                 Domain
                                                                                                                                                                                                                                                                                                                                          Domain
                                                                                                                                                                                                                                                                                                                                                                                   Domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel
                                                                                                                                                                                                                                            Key
  ζ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ERLKCERDDALKEVNTLKEKLLESDKORKQLTEELQNVKQEAKAVVEETRALRSRIHLAE 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DGRLKPGDQLVSVNKESMIGVSFEEAKSIITRAKLRLESAWEIAFIROKSDNIQPENLSC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALRQQVQADSKGTVSFGDFVQVARNLFCLQLDEVNVGAHEISNILDSQLLPCDSSEADEM 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQRQAHGMEMDYEEVIRLLEAKITELKAQLADYSDQNKESVQDLKKRIMVLDCQLRKSE 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MARKTFEASTEKLIHFVEAIQEVFSDNSTPLSNLSERRAVLASQTSLTPLGRNGRSIPAT 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            419 MARKIPEASTEKLLHFVEAIQEVFSDNSTPLSNLSERRAVLASQTSLTPLGRNGRSIPAT 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LALESKELVKSVRALLDMDCLPYGWEBAYTADGIKYFINHVTQTTSWIHPVMSVLNLSRS 537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ALRQQVQADSKGTVSFGDFVQVARNLFCLQLDEVNVGAHEISNILDSQLLPCDSSEADEM 298
                                                                                                                 expression of Syntaxin 4 interacting protein. The antisense objectives of the invention are useful for inhibiting the expression of Syntaxin 4 interacting protein in cells or tissues. The antisense oligomucleotides are also useful for treating an animal having a disease or condition associated with Syntaxin 4 interacting protein (e.g. diabetes, obesity or a skeleral muscle disorder). The antisense oligomucleotides can also be used to prevent or delay infection, inflammation and tumour formation. The present amino acid sequence represents a human Syntaxin 4 interacting protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Q9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MAKATSTVVSPSLLEKDPAFQMITIAKETGLGLKVLGGINRNEGPLVYIQEIIPGGDCYK 60
                                                                                                  invention comprises antisense oligonucleotides designed to inhibit
                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MNKNTSTVVSPSLLEKDPAFQMITIAKETGLGLKVLGGINRNEGPLVYIQEIIPGGDCYK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             119 VMYITYRSFRRIWISSLNIKSFSLLLKYSIPKPSSPPKTWNJLLSSCEIKTGYNKTVQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PITSENSTVGLSNTDVASAWTENYGLOEKISLNPSVRFKAEKLEMALNYLGIOPTKEOHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ERLKCERDDALKEVNTLKEKLLESDKORKOLTBELONVKOEAKAVVEETRALRSRIHLAE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQRQAHGMEMDYEEVIRLLEAKITELKAQLADYSDQNKESVQDLKKRIMVLDCQLRKSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TSLIEASGEYGPQASTLSLFSSPPEIL -- - IPKTSSTPKTNNDILSSCEIKTGYNKTVQI
encoding Syntaxin 4 interacting protein, useful for treating
                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                           DB 23; Length 554;
                                                                                                                                                                                                                                                                                                                                                                                                    5.
                                                                                                                                                                                                                                                                                                                                                                                                    27; Indels
                                                                                                                                                                                                                                                                                                                                                         Score 2549.5; DB 23
Pred. No. 1.4e-190;
5; Mismatches 27;
                     and skeletal muscle disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Murine syntaxin-4 interacting protein (SYNIP)
                                                       Disclosure; Page 100-104; 154pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY52446 standard; protein; 557 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EENEEDCSRELPNQKS 553
                                                                                                                                                                                                                                                                                                                                                           91.6%;
93.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EENEEDCSRELPNOKS
                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                              al Similarity
519; Conserv
                                                                                                                                                                                                                                                                                                                    554 AA;
                     diabetes, obesity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-FEB-2000
                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAY52446;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  538
  molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY52446
q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             dC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ठे
```